DS7200V2-EXP

Security Systems

EN

Expert Programming Guide

Control Panel

BOSCH

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1. Introduction

1.1 Documentation Conventions

1.1.1 Type Styles Used

To help identify important items in the text, the following type styles are used:

Bold text	Indicates important text or terms that you should note.
Italicized text	Refers you to a drawing, table, or other section of this document.
[9][8][7][6]	Bracketed numbers represent keypad keys. When next to one another, they represent the key sequence to press for a particular function. For this example, pressing the keys shown enters the default Installer PIN.
1|6	Numbers separated by a vertical bar represent output function types. This example is for Output Function Type 1|6: Strobe.

1.1.2 Notes, Cautions, and Warnings

Throughout this document there are important notes that address personal and/or equipment safety issues, system operation issues, etc. They are set off as follows:

The Important Note identifies information intended for successful operation.

The Caution Note identifies information intended to prevent an incident that could prohibit the functionality of the program/equipment.

The Warning Note identifies information intended to prevent an incident that could prohibit the functionality of the program/equipment and/or personal injury.

1.1.3 Other Conventions

Programming parameter titles are identified as follows:

Programming Parameter Title

2. Scope of Document

See *Table 1* for an overview of this document and other documents related to the DS7240V2/DS7220V2 Control Panels:

Table 1: Document Overview

Document	Part Number	Description
User's Guide	4998153894	Contains keypad operation instructions for the end-user. Covers use of the LCD (text) keypad and the LED keypad.
Installer's Guide	4998153893	Contains all wiring and setup instructions, and basic programming parameters with descriptions. Troubleshooting information also included.
Expert Programming Guide (this document)	4998153891	Contains all programming parameters with descriptions and keypad programming instructions.
Release Notes	4998153890	Contains issues with control panel that were found after printing of the documentation.
System Worksheet	4998153887	Contains all programming parameter defaults and space to record any default changes made during setup of the control panel.

3. How to Program

3.1 Keypad Programming

3.1.1 Installer Mode/Installer Menu

A text keypad such as the DS7447E or DS7447V2 LCD Keypad can be used for keypad programming. The DS7445i and DS7445V2 LED Keypads cannot be used for keypad programming.

Use of the Installer PIN might be restricted. See *Keypad Response Options* on page 70 for information on enabling/restricting the Installer PIN.

There are three methods to access the control panel's programming mode. Choose a method from below and follow its subsequent steps.

1. From a LCD (text) system keypad:
   a. Enter the Installer's PIN. The default Installer PIN is 9876. See *Installer PIN* on page 63 for instructions on changing the default Installer PIN.
   b. Press [#][4][1] to enter the Installer's Menu.
   c. Press the [8] key to enter the programming mode.

   From an Installer Keypad:
   d. Set the Installer Keypad address to 0 (zero).
   e. Connect the Installer Keypad to the control panel. See "Installer Keypad" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for instructions.
   f. Close the Installer Switch.
   g. Enter the Installer PIN.
   h. Press [#][4][1] to enter the Installer's Menu.
   i. Press the [8] key to enter the programming mode.

   Without an Installer's PIN:
   j. Remove all power from the control panel (Mains and standby battery).
   k. Close the Installer Switch.
   l. Connect the Installer Keypad to the control panel if you are using an Installer Keypad.
   m. Restore all power to the control panel.
   n. Locate the keypad displaying the Installer Menu.
   o. Press the [8] key.

3.1.2 Expert/Installer Programming Modes

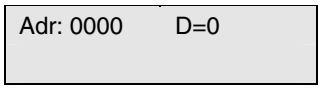
- **Installer Programming Mode:** Installer Programming Mode is the control panel's default programming mode. This mode allows the installer to access only a subset of the available programming parameters. Installer Programming Mode follows through the addresses shown in the programming section of the *DS7200V2 Installer's Guide* (P/N: 4998153893).
- **Expert Programming Mode:** When the control panel enters the Expert Programming Mode, all of the available programming parameters can be accessed. This manual contains all of the available programming parameters. Follow these steps to enter the Expert Programming Mode:
  1. Enter Installer Mode (see *Installer Mode/Installer Menu* for instructions).
  2. Press [7][2][4][0][#] if you are programming a DS7240V2. Press [7][2][2][0][#] if you are programming a DS7220V2.
  3. Press [1][*]. The control panel enters Expert Programming Mode, and the display shows Address 0.

3.1.3 Parameter Addresses

Data for each parameter is stored at one or more addresses. Special addresses identified as option parameters allow you to set several options at a single address.

There are two parts to every address displayed across the keypad's top line:

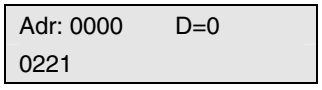
- **Adr: XXXX:** The number following "Adr" indicates the current address displayed.
- **D=X:** "X" indicates the data digit selection for the address currently displayed.



To view a specific address, enter the 4-digit address number and then press [#].

For example, to go to Address 0221, press the following keys in this order: [0][2][2][1][#].

Leading zeroes can be omitted. Pressing [2][2][1][#] is the same as pressing [0][2][2][1][#].

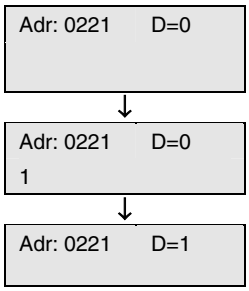


To scroll forward one address at a time, press [#]. To scroll back one address at a time, press [*].

Follow these steps to edit the data digit entry for an address:

1. Enter the address.
2. Press the [#] key.
3. Enter the new value (0 to 15).
4. Press the [*] key.

For example, to change the data digit for Address 0221 from 0 to 1, press the following keys in this order: [1][*]. The new value appears on the second line of the display.



Follow these steps to fix an incorrect data digit entry:

1. Press the [#] key.
2. Re-enter the address you wish to program.
3. Press the [#] key.
4. Enter the desired data digit value (0 to 15).
5. Press the [*] key.

Certain addresses are skipped during keypad programming: Reserved addresses and Expert addresses. *Table 2* identifies these addresses.

- **Reserved Addresses:** These addresses are reserved for future development.
- **Expert Addresses:** These addresses are only available when the control panel enters Expert Programming Mode.

Table 2: Reserved and Expert Addresses

Reserved Addresses		
DS7240V2	**DS7220V2**	**Expert Addresses**
0214-0219	0214-0219	0065
0237	0237	0132-0180
0274-0275	0274-0275	0222-0236
0282-0285	0282-0285	0238-0248
0292-0295	0292-0295	0255-0257
0304-0307	0304-0307	0260
0314-0317	0314-0317	0262-0273
0326-0329	0320-0363	0297
0336-0339	0826-0905	0319
0348-0351	1035-1037	0341
0358-0361	1128-1183	0363-0378
1035-1037	1252	0703
1252	1262	0906-1034
1262	1522-1649	1038-1043
2940-2943	2418-2929	1251
2945-3405	2940-2943	1253-1261
3430-3433	2945-3405	1263-1265
3434-3441	3430-3433	2930-2939
3442-3505	3434-3441	2944
3541-3545	3442-3505	3406-3413
3554-9999	3541-3545	3507-3513
	3554-9999	3515-3521
		3523-3529
		3531-3537
		3539-3540
		3886-3910

Press [#] to move forward to the next available address. Press [*] to move back to the previous available address.

3.1.4 Text Entry Addresses

All text entry addresses (System Text, Area Text and Location Text) require the use of a special text-programming mode. In this mode, the keypad keys display different characters depending on the number of times the keys are pressed. See *Table 3*.

A character's order in the character selection sequence indicates the number of key presses necessary to produce the character. For example, pressing the [2] key four times produces "a."

Table 3: Key/Character Assignments

Key	Character
0	+ - 0 * / \ [ ] = > < # §
1	Space . 1 ? ! , @ _ & ~ : ; " ( ) ' ¿ ¡ % £ $ ¥
2	A B C a b c 2 Å Ä Ã å ä á à â ã α β Ç ç
3	D E F d e f 3 É Æ ë é è ê æ Δ Φ δ ε
4	G H I g h I 4 ï í î ì Γ γ η ι
5	J K L j k l 5 Λ κ λ
6	M N O m n o 6 Ö ö Ñ ñ Ø Õ ø ó ò ô õ Ω µ v ω
7	P Q R S p q r s 7 Π Σ π ρ σ
8	T U V t u v 8 Ü ü ú ù û Θ Y θ τ υ
9	W X Y Z w x y z 9 ÿ Ξ Ψ ξ χ ψ ζ
*	Moves to the address before the text block.
#	Moves to the address after the text block.
A	Moves cursor to the previous character position in text block.
C	Moves cursor to the next character position in text block.

The following keys are not used in text programming and produce an error tone when pressed:

- [B]
- [On]
- [Off]
- [Perimeter Only]
- [No Entry]
- [Bypass]
- [System Reset]

Press [1] once to clear a character space or to enter a blank space.

3.1.5 Exit Programming Mode

Press and hold [#]. The LCD keypad displays the control panel's model number and firmware revision number on the top line, and "Please Wait..." on the bottom line. This message remains for approximately 10 sec.

To reduce the occurrence of false alarms at power-up (or restoration of power after a complete loss of primary and secondary power) or upon exiting programming mode, the control panel ignores all zone alarms for approximately 60 sec while the devices stabilize.

4. Control Panel Programming

The contents of this section are organized as in Remote Programming Software (RPS).

This section covers all of the available programming parameters. The programming section in the *DS7200V2 Installer's Guide* (P/N: 4998153893) covers the programming parameters only available when the control panel is in the Installer Programming Mode.

This section contains programming parameter information pertaining to the DS7240V2 and DS7220V2 Control Panels. Settings for parameters are stored at one or more addresses. For an overview of how to program the control panel from a DS7447E or DS7447V2 Text Keypad, see *Keypad Programming* on page 5.

Numbers enclosed in braces, (for example, {137}) that appear throughout this document refer to the control panel's event numbers. See *Control Panel Events and Reporting Formats* on page 138 for event descriptions.

The default Installer PIN is 9876. The default PIN for User 1 is 1234. All other user PINs are not programmed by default. See *Installer PIN* on page 63 and *PIN, User #* on page 65 for more information.

4.1 Understanding the Parameter Option Charts

The programming section of this document uses charts like the one below to identify the available selections for option parameters.

	Enter This Data Digit to Select Options															
Phone Line Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Phone Line Options	•															
Do Not Wait for Dial Tone		•		•						•		•				
"R" Function/Three-way Calling			•	•							•	•				
Reserved																
Phone Line Fault Requires Reset									•	•	•	•				

The first option usually disables or turns off all the other options.

The data digit values (labeled 0 to 15 under the "Enter This Data Digit to Select Options" heading) are displayed across the top of the table. Each data digit is ties to options by a "•." To select an option, enter the corresponding data digit value at the address programming prompt.

The option parameter's default selection is listed above the table in bulleted form along with the option's address and selection range. The numbered cell that corresponds with the option's default setting is blackened to provide a quick visual reference. For example, the cell labeled "10" in the example above is this option parameter's default.

Columns that are grayed out are reserved settings and should not be selected.

4.2 Panel Wide Parameters

4.2.1 Routing Destinations

The control panel has two routing destinations for the routing of reports. The control panel routes by zone and report group to the destinations. For example, you can send alarm reports for one zone to Destination 1 and for another zone to Destination 2.

You can program two phone numbers (or IP addresses) for each destination.

Communication Fail events are by destinations and not by phone number/IP address.

For a description of the routing/dialing process, see "Dialing Attempt Tables" in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Phone Number 1 (2) for Destination 1 (2))

- **Address Range:**
  - **Phone 1, Destination 1:** 0000 to 0031
  - **Phone 2, Destination 1:** 0032 to 0063
  - **Phone 1, Destination 2:** 0066 to 0097
  - **Phone 2, Destination 2:** 0098 to 0129
- **Default:** All zeroes (0)
- **Selections:** 0 to 14 (see *Table 4*)

Table 4: Phone Number Entry Selections

Digit to be Dialed	Enter at Keypad		Digit to be Dialed	Enter at Keypad
1	1		9	9
2	2		**0**	**10**
3	3		*	11
4	4		#	12
5	5		P (4-sec pause)	13
6	6		F (on-hook, pause, off-hook)	14
7	7		Reserved	15
8	8		**T (Terminate)**	**0**

When entering phone numbers, enter "10" ([1][0] from the keypad) to dial "0"; enter "0" to terminate the phone number. This does not apply when entering an IP address.

Terminate telephone numbers with less than 32 digits by entering a zero (0) in the Address after the last digit to be dialed.

The control panel can dial up to 32 digits per phone number. Each digit occupies one address. If less than 32 digits are entered into the Phone Number Address range, the control panel dials digits until it reaches a terminator (0).

IP addresses can be entered into these addresses for network communication. See *Network Communication* on page 129 for more information. Firmware revision 2.10 or greater is required for network communication.

See *Area # Account Number* on page 48 for instructions on entering an account number.

Format for Destination 1 (2)

- **Address:**
  - **Format for Destination 1:** 0064
  - **Format for Destination 2:** 0130
- **Default:** 2 (Contact ID)
- **Selections:** 2 to 4, 7, 11
  - 2 = Contact ID
  - 3 = SIA 300
  - 4 = Basic Pager
  - 7 = Personal Dialing Format
  - 11 = SIA 300 with Text Blocks

This parameter selects the reporting format. All reports for this destination are sent in the format chosen here.

If you configure the control panel for network communication, you must set this parameter to Contact ID. See *Network Communication* on page 129 for more information. Firmware revision 2.10 or greater is required for network communication.

Check communications from control panel to Alarm Receiving Center (ARC) to verify that the control panel is communicating properly in the selected reporting format.

4.2.2 Reporting Format Configuration

Personal Dialing Format

Select the Personal Dialing Format by entering "7" into the appropriate reporting format address. See *Format for Destination 1 (2)* on page 10 for more information. The control panel calls a phone number where a person is expected to answer.

The control panel starts by placing a phone call. The control panel then sends the first digit of the report, waits one second, and then sends the second digit of the report. The control panel then waits three sec, and sends the report again. The control panel continues to repeat the report for a total of ten times. Some reports have zero as the second digit. In these cases, only the first digit is sent, the control panel waits approximately three sec, and then the report is repeated.

During the three-second delay between each report, pressing [5] on the phone's keypad acknowledges the report. The control panel advances to the next event in the dialer queue and sends it in the same phone call, or hangs up if there are no more events to report. The control panel send each report up to ten times or until it is acknowledged.

If no one acknowledges the report after ten tries, the control panel hangs up and calls again. If two phone numbers are programmed for the destination, the second phone number is called. The control panel follows the normal event phone routing. For each event, the control panel tries five times or until the event is acknowledged. If no acknowledge is received in the five phone calls, the control panel logs a communication failure for the destination.

The control panel divides all possible events into Event Groups as reported to RPS. This event group selects which report to send. The event groups are numbered 1 to 16. The following table lists the 16 possible event groups. *Table 31* details all events generated by the control panel. Not all events are transmitted in Personal Dialing Format.

- **Address:** See *Table 5*
- **Default:** See *Table 5*
- **Selections:** 0 to 15

Table 5: Personal Dialing Format Configuration

Event Group	Address	Personal Dialing Format Code	Data Digit Default
1	3414	Duress	0
2	3415	Fire Alarm	1
3	3416	Non-fire Alarm	2
4	3417	Reserved	0
5	3418	Fire Trouble	5
6	3419	Non-fire Trouble	6
7	3420	Fire Restoral	0
8	3421	Non-fire Restoral	0
9	3422	RF Trouble	0
10	3423	Open/Close	0
11	3424	Installer Mode	0
12	3425	System Fault	8
13	3426	Test Report	0
14	3427	Reserved	0
15	3428	Bypass	0
16	3429	Output/User	0

Use this parameter to select the tone for the 16 different Personal Dialing Format event groups.

For each event group, the report is programmed as a value from 0 to 15. If 0 (zero) is programmed, no report is sent and the event is a Local Only event.

See *Table 6* for the two-digit report tone when the value entered is non-zero (1to15).

Table 6: Report Tone Selections

Data Digit Selection	Report Tone
0	None
1	1 0
2	1 1
3	2 0
4	1 2
5	2 1
6	3 0
7	1 3
8	2 2
9	3 1
10	4 0
11	1 4
12	2 3
13	3 2
14	4 1
15	5 0

For example, if Data Digit Selection "5" is entered, the following report tone is transmitted ("-" equals 1 beep): -- -. There is a 1-second pause between the transmission of the first digit and the second digit. The second digit is followed by a 3-second pause.

The control panel repeats the report for a total of ten times (-- - -- - -- - -- - -- - -- - -- - -- - -- - -- -)

SIA 300 with Text Blocks

The control panel sends reports using the SIA format when "3" is entered into the appropriate reporting format address. See *Format for Destination 1 (2)* on page 10 for more information. An additional format (selection of "11") is available to include ASCII text with the SIA event codes.

If the SIA event includes a zone number as one of its parameters, and the zone represents one of the control panel's 40 locations, the control panel sends the zone's programmable location text (see *Location ##,* Zone Text on page 86 for more information). The event (N) block is sent first followed by the text (A) block. If there is no zone number for the event, then no ASCII text is reported.

Basic Pager Display

Setting a Routing Destination to Basic Pager format configures the control panel to send reports to a numeric pager. Follow these steps to use the Basic Pager format:

1. Enter the phone number for the pager in the "Phone Number 1" parameter for the Routing Destination you have chosen as the Basic Pager Destination.
2. Set the "Format for Destination 1 (2)" parameter to **Basic Pager** for the Routing Destination you have chosen as the Basic Pager Destination.

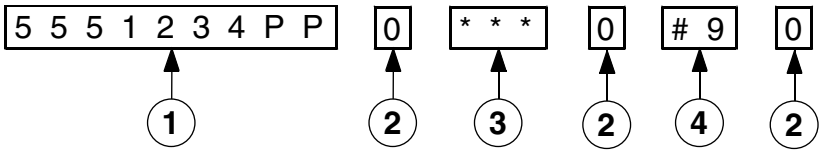
Set the routing for any reports you would like sent to the pager to the Routing Destination (1 or 2) you have chosen as the Basic Pager destination.

Report digits are dialed as 100-ms DTMF tone pulses with 100-ms pauses between the digits.

The control panel's Basic Pager format does not wait for an acknowledgement tone from the pager service provider to send its report to the pager. It dials the phone number, waits 250 ms and then sends the report. To increase the delay (pause), add delay characters as needed to the end of the phone number. See *Table 4* on page 9 for the valid phone number entries.

All information the control panel needs to format and send events to a pager is contained in *Phone Number 1 (2) for Destination 1 (2)* on page 9. *Figure 1* shows the phone number broken into fields.

Figure 1: Routing Destination Phone Number Configured for Basic Pager



1- ***Digits to Dial Field:*** *Enter the phone number for the paging service followed by any special characters required (a pause, for example). See Table 4 on page 9for phone number entries.*

2- ***Field Terminator:*** *Every field must end with the terminator digit, always 0 (zero).*

3- ***Format Field:*** *Use this field to configure how the message appears in the pager's display. See Table 7 on page 13 for Format Field options.*

4- ***End Page Field:*** *Enter the digits that tell your paging service you are done sending your page.*

The control panel dials the number you enter in the **Digits to Dial Field** to contact the paging service. Add one or more pauses at the end of the number to allow the paging service time to answer the phone and prepare to accept the message. The **Digits to Dial Field** ends with a Field Terminator (0).

The **Format Field** follows the **Digits to Dial Field**. It defines what information follows the account number in the paging message. The **Format Field** ends with a **Field Terminator** (0).

The **End Page Field** follows the **Format Field**. The digits you enter in this field are sent after the paging message. For many paging services, a '#' indicates the end of the paging message. The **End Page Field** ends with a **Field Terminator** (0).

You must enter the pauses required for the paging service in the Digits to Dial Field before the Digits to Dial field terminator.

The number of pauses required varies based on the paging service.

Test the pager to determine that you entered enough pauses to establish communications to the paging service.

Table 7: Format Field Options

Format Field	Resulting Pager Display	
Empty	Account, Event, Area, and Zone Numbers with separator characters	1234-008-03-21
#	Account, Event, Area, and Zone Numbers without separator characters	12340080321
***	Account, Event, and Area Numbers with separator characters	1234-008-03
#***	Account, Event, and Area Numbers without separator characters	123400803
**	Account and Event Numbers with separator characters	1234-008
#**	Account and Event Numbers without separator characters	1234008
*	Account Number only	1234

If the zone/user number is three digits, the leading digit is omitted. For example, "252" displays as "52."

Do not use alpha characters for the account number in basic pager format.

4.2.3 Phone, Auto-Forward, and RPS Configuration

Integral Voice Verification Module

- **Address:** 0065
- **Default:** 0
- **Selections:**
  - 0 = Disable Voice Verification
  - 1 to 15 = Enable the Voice Verification Module and identify which output is the Voice Request output in Area 1

This parameter enables the voice verification module. Program one of the first 15 outputs as Output Function Type 2|10 "Voice Request." Enter that output number (1 to 15) in this parameter. See *Function, Output ##* on page 112 for more information.

Set this address to 0 if the integral voice verification module is not installed.

Phone Line Options

- **Address:** 0131
- **Default:** 0
- **Selections:** 0 to 3, 8 to 11

	Enter This Data Digit to Select Options															
Phone Line Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Phone Line Options	•															
Do Not Wait for Dial Tone		•		•						•		•				
"R" Function/Three-way Calling			•	•							•	•				
Reserved																
Phone Line Fault Requires Reset									•	•	•	•				

This parameter consists of three options for the physical phone line.

- **Do Not Wait for Dial Tone:** If this option is enabled, the control panel waits three sec after going off-hook and then starts dialing. If this option is disabled, the control panel waits up to seven sec for a dial tone. The control panel dials when it detects the dial tone.
- **"R" Function/Three-way Calling:** If this option is enabled, the control panel's "R" function/three-way calling feature is enabled. The phone company must enable this option on the control panel's telephone line.
- **Phone Line Fault Requires Reset:** If this option is enabled and a phone line fault occurs, the trouble condition (keypad trouble message and/or tone) continues until the [System Reset] key is pressed (fix the phone line fault first). If this option is not disabled and a phone line fault occurs, the trouble condition clears automatically when the phone line fault is corrected. This option also applies to the Alternate Communication Path Fault Control Input (see *Options 1 for Zone Function Type 3 (24-hr Control Input)* on page 97).

DTMF/Pulse Dialing

- **Address:** 0132
- **Default:** 0 (DTMF)
- **Selections:**
  - 0 = DTMF
  - 1 = Pulse

This parameter selects the control panel dialing format (DTMF or Pulse). This format is used for all dialing attempts.

Call Forwarding Auto On/Off Digits

- **Address:**
  - **Call Forwarding Auto On Digits:** 0133 to 0164
  - **Call Forwarding Auto Off Digits:** 0165 to 0180
- **Default:** All zeroes (0)
- **Selections:** See *Table 4* on page 9
  - **Call Forwarding Auto On Digits:** Up to 32 characters max
  - **Call Forwarding Auto Off Digits:** Up to 16 characters max

This parameter configures the control panel's Call Forwarding Auto On/Off operation.

In order to use this parameter, the premises must have Call Forwarding service from the local telephone company. Call Forwarding Auto On/Off does not forward calls; it turns the telephone company's Call Forwarding service on or off by dialing digits just as the user would.

When entering phone numbers, use "10" ([1][0] from the keypad) to enter "0"; use "0" to terminate the phone number.

Call Forwarding Auto On/Off is only available for Area 1.

If Call Forwarding Auto On/Off is enabled ([#][8][2]) and a user turns the system All On, the control panel dials the Call Forwarding Auto On digits to activate the telephone company's Call Forwarding service.

If Call Forwarding Auto On/Off is enabled ([#][8][2]) and a user turns the system off (from All On), the control panel dials the Call Forwarding Auto Off digits to turn off the Call Forwarding service.

- A typical dialing sequence might be:
- Two-digit telephone company code (*21*)
- Pause
- Phone number to forward to (Example: 555-1212)
- Flash (on-hook, pause, off-hook)
- Terminate (t)

For this sequence, the entry at this parameter is *2 1 * p 5 5 5 1 2 1 2 f t.

See the *DS7200V2 User's Guide* (P/N: 4998153894) for more information on Call Forwarding Auto On/Off.

Remote Programming Call Back Number

- **Address:** 0181 to 0212
- **Default:** All zeroes (0)
- **Selections:** See *Table 4* on page 9

The control panel dials this phone number (or IP address) to begin a RPS remote programming session. See *Network Communication* on page 129 for complete network communication programming instructions. Firmware revision 2.10 or greater is required for network communication.

There are three ways to use this phone number (or IP address):

1. RPS calls the control panel, which answers and determines it is RPS calling, then it disconnects and calls RPS back.
2. When a user presses [#][4][3], the control panel calls RPS using the phone number (or IP address) entered here.
3. The control panel can be programmed to use this phone number (or IP address) automatically at test report time (see *Automatic Test {137} Report Options* on page 31 for more information).

When entering phone numbers, enter "10" ([1][0] from the keypad) to dial "0"; enter "0" to terminate the phone number. This does not apply when entering an IP address.

RPS Answer Ring Count, Answering Machine Bypass

- **Address:** 0213
- **Default:** 7 (rings)
- **Selections:**
  - 0 = Control panel does not answer phone
  - 1 to 13 = Ring Count
  - 14 = Answering Machine Bypass 1
  - 15 = Answering Machine Bypass 2

The ring count sets the number of rings the control panel waits before picking up and seizing the phone line for a remote programming session, or for remote arming with a telephone (see *Arming Options 1* on page 37).

The control panel does not answer the phone for remote programming or remote arming with telephone when this parameter is set to zero (0).

This ring count is used for any control panel arming state, armed or disarmed.

The Answering Machine Bypass function can be restricted to only operate when the system is armed All On or Perimeter Only (see *Arming Options 1* on page 37). When the Answering Machine Bypass function is restricted to only operate when the system is armed All On or Perimeter Only, the control panel does not answer the phone for a remote arming session when it is disarmed (Off). However, [#][4][3] still initiates a remote programming session.

Answering Machine Bypass 1

1. Call the premises; let the phone ring no more than two (2) times. Then hang up/disconnect the remote programmer.
2. Wait at least eight sec to call back, but call back within 45 sec.
3. The control panel then picks up after the first ring.

Answering Machine Bypass 2

1. Call the premises; let the phone ring no more than four (4) times. Then hang up/disconnect the remote programmer.
2. Wait at least eight sec to call back, but call back within 45 sec.
3. The control panel then picks up after the first ring.

Phone Line Fault Response Options

- **Address:** 0220
- **Default:** 0
- **Selections:** 0, 1, 3, 5, 7

	Enter This Data Digit to Select Options															
Phone Line Fault Response Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Phone Line Supervision	•															
Enable Supervision (System Trouble at Keypad)		•		•		•		•								
Burg Alarm & Strobe Functions, All On/Perimeter Only				•				•								
Burg Alarm & Strobe Functions, Off						•		•								
Reserved																

The control panel monitors the phone line for voltage only. If the voltage drops low enough (between 1 and 3 V) for 40 sec, it declares a phone line fault. If the phone line voltage remains above 3 V for at least 40 sec, it declares the phone line restored. See the "Phone Line Fault Requires Reset" option in *Phone Line Options* on page 14.

When enabled, the Phone Line Fault event appears at all keypads for all areas. The control panel sends a Phone Line Restore {100} report when a phone line fault event restores.

If the phone line fails (as described above), but restores before a Comm Fail event:

1. System detects phone line fail and puts Event {99} in the log.
2. System starts dialing attempts if programmed for Phone Fail report.
3. Phone line restores before Comm fail event.
4. System sends phone line fail and phone line restore reports.

If the phone line fails (as described above), but restores after a Comm Fail event:

1. System detects phone line fail and puts report in the event in the log.
2. System starts dialing attempts if programmed for Phone Fail report.
3. Dialing attempts end with Comm fail event, phone fail report is flushed.
4. System detects phone line is restored and puts restoral report in buffer.
5. System starts dialing attempts and sends phone fail restoral and Comm restoral reports.

If an alternate communication path is enabled, the control panel can send a Phone Line Fail {99} report via the alternate communication path when a phone line fault event occurs.

- **No Phone Line Supervision:** If this option is enabled, the control panel does not monitor the phone line voltage. Phone Line Fault events do not appear at keypads. The other Phone Line Fault Response options are also disabled if No Phone Line Supervision is selected.
- **Enable Supervision (System Trouble at Keypad):** If this option is enabled, the keypad displays a phone line trouble message if a phone line fault occurs as described above. To enable the keypad to sound a trouble tone on system troubles, see *Keypad # Options* on page 67 for details.
- **Burg Alarm & Strobe Functions, All On or Perimeter Only:** If this option is enabled, the system's burglary alarm and strobe function as configured when the system is armed All On or Perimeter Only if a phone line fault occurs as described above. See *Output Parameters* on page 107 for burglary alarm/strobe output configuration.
- **Burg Alarm & Strobe Functions, Off:** If this option is enabled, the system's burglary alarm and strobe function as configured when the system is off (not armed) if a phone line fault occurs as described above. See *Output Parameters* on page 107 for burglary alarm/strobe output configuration.

4.2.4 Global Reporting Options

These parameters configure the reporting for all areas, all zones, and all users.

Global Reporting Options

- **Address:** 0221
- **Default:** 1
- **Selections:** 0, 1, 3, 5, 7, 9, 11, 13, 15

	Enter This Data Digit to Select Options															
Global Reporting Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Local Only	•															
Enable Reporting		•		•		•		•		•		•		•		•
Extend Handshake				•				•				•				•
Delay Alarm Output						•		•						•		•
Burg Alarm after Two Failed Attempts										•		•		•		•

- **Local Only:** The control panel sends no reports.
- **Enable Reporting:** If this option is enabled, the control panel sends reports as programmed provided that at least one phone number (or IP address) has been programmed for at least one Routing Destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9). Reporting options can be enabled and disabled in other parameters. See *Open/Close Reporting Options* on page 39, and *Area # Opening {89-96}/Closing {42-67} Reporting Options* on page 49 for more information.
- **Extend Handshake:** If this option is enabled, the control panel finishes dialing the ARC receiver and waits for a 'handshake' tone from the receiver. The handshake is the first thing the receiver sends after answering the phone. Typically each reporting format the receiver supports has its own handshake tone. If a receiver supports several formats, it sounds the handshake tones one at time. Choosing this option extends the time the control panel waits for a handshake from the ARC receiver from 45 to 60 sec.

Do not change the Extend Handshake option unless advised by Bosch Technical Service.

- **Delay Alarm Output:** If this option is enabled, the control panel delays burglary alarm output until communication to the ARC receiver is complete or there are two failed dialing attempts. The delayed alarm output functions are 1|8, 1|9 and 1|10 (see *Table 25* on page 112 for descriptions of output function types). Bell Time is not delayed, and begins at the alarm event. If Bell Time is set at three min. or less, alarm output delayed by this option may be very short (less than 1 minute), or the alarm output may not activate at all. See *Output Parameters* on page 107 for a complete description of output functions. The keypad sounder is not delayed by this option.

Disable the Alarm Event Abort option when using the Delay Alarm Output option. See *Options 1, Zone Function* ## on page 95.

- **Burg Alarm After Two Failed Attempts:** If this option is enabled, a steady alarm output sounds after two failed attempts to transmit a burglary alarm report from any zone when its area is armed. Alarm output is provided even if the zone is not programmed for alarm output. Program Bell Time to at least 3 min. when using this option. Disable this option if you want to prevent an alarm output from silent zones even when the system fails to communicate with the receiver. This option only applies to the following output function types:
  - **1|8 Alarm:** All On, Perimeter Only, and Partial On (Non-Fire 24-hr alarms)
  - **1|9 Alarm:** Perimeter Only and Partial On Modes (Non-Fire 24-hr alarms)
  - **1|10 Alarm:** Controlled Zones and 24-hr Zones (Fire and Non-Fire)

  See *Output Parameters* on page 107 for alarm configuration.

The burg alarm output activates after two failed communication attempts even if the zone is set for silent operation.

Ack Wait Time

- **Address:** 0222
- **Default:** 5 (5 sec)
- **Selections:**
  - 0 = 1 second
  - 1 to 15 = 1 to 15 sec (1-second increments)

This parameter sets the amount of time the control panel waits for an acknowledgment tone from the ARC receiver.

Do not change the default value unless advised by Bosch Technical Service.

AC Power Supervision Options

- **Address:** 0223
- **Default:** 4
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
AC Power Supervision Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
AC Fail Report is Tag-along		•		•		•		•		•		•		•		•
Disable AC Fail Local Annunciation (at keypad)			•	•			•	•			•	•			•	•
Enable Arm/Disarm/Bypass Tracking					•	•	•	•					•	•	•	•
Enable Internal Crystal to Keep Time									•	•	•	•	•	•	•	•

This parameter configures the control panel's local response to AC power failure.

AC power must be failed for a maximum of 10 sec before the control panel responds to the failure. It must be restored for a maximum of 10 sec before the control panel responds to the AC restoral. See *AC Fail Report Delay* on page 34 for instructions on delaying the AC Fail Report.

The trouble tone for AC fail events sounds at all keypads in all areas. However, the trouble tone must be silenced in each area. Silencing the trouble tone in one area does not silence it in the other areas.

- **AC Tag-along:** If this option is enabled, AC Fail and Restoral reports are not sent at the time of the event, but are sent as 'tag-along' reports with the next report to be sent.
- **Disable AC Fail Local Annunciation (at Keypad):** If the control panel is only powered from a DC power source (through battery connections), select Option 2, "Disable AC Fail Local Annunciation." This prevents the control panel from annunciating AC failures locally at the keypad. You must also disable AC Fail reporting at the next parameter, "AC Fail, Low Battery Report Options."
- **Enable Arm/Disarm/Bypass Tracking:** If If this option is not enabled, the control panel always powers up in the disarmed state (Off), even if the control panel was armed before powering down. Zones that were bypassed before powering down are not bypassed at power-up.
- **Enable Internal Crystal to Keep Time:** Not enabling this option keeps time by looking at the Mains AC power. Enable this option if running on DC only (for example, if you are generating your own power or power cycles are not consistent), otherwise leave set to default.

AC Fail {1}/Low Battery {22} Report Options

- **Address:** 0224
- **Default:** 7
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
AC Fail, Low Battery Reporting Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No AC Fail Reports, No Low Battery Reports	•															
AC Fail Reports		•		•		•		•		•		•		•		•
AC Restoral Reports			•	•			•	•			•	•			•	•
Low & Missing Battery and Restoral Reports					•	•	•	•					•	•	•	•
Ground Fault and Restoral Reports									•	•	•	•	•	•	•	•

AC Fail, Low Battery and Ground Fault events occur at all keypads for all areas. This parameter enables reporting of AC power and battery supervision events, and ground fault events.

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

The battery is considered low if the nominal voltage on its terminals drops below 12.1 V. The low battery is considered missing if the nominal voltage on its terminals drops below 10.2 V.

System Status Report Swinger Count

- **Address:** 0225
- **Default:** 0 (Disabled)
- **Selections:**
  - 0 = Disabled
  - 1 to 15

Set this parameter to zero (0) to disable the System Status Report Swinger. System Status reports are sent as they occur.

Entering a value from 1 to 15 enables System Status Report Swinger and sets the swinger count. Each system status report has its own swinger counter. When the count is reached that report is no longer transmitted during the arming cycle.

For example, if you entered 1 at this parameter, the control panel would only transmit one AC fail report, no matter how many times AC failed and restored during the arming cycle.

Not all System Status Reports follow this Swinger Count. System Status reports that follow the count set in this parameter are marked with an "S" in *Table 31* (see page 138).

To reset the System Status Report Swinger Count, arm and then disarm the control panel.

System Status Report Routing

- **Address:** 0226
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

System Status reports routed by this parameter are marked with an "R" in *Control Panel Events and Reporting Formats* on page 138.

Comm Fail 1 (2) reports follow System Status Reports routing. Comm Fail reports for either destination are only sent if the other destination is the System Status Reports destination. See "Communication Failure (Comm Fail)" for a description of the Comm Fail event, and "Dialing Attempt Tables" for the dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Call for Service Interval

- **Address:** 0227, 0228
- **Default:** 0,0
- **Selections:** 00 to 99

This parameter determines the interval in weeks (7 days), (00 to 99). For example, if you enter 0,2, the control panel waits 2 weeks (14 days) between displaying service messages.

At this interval, the keypad displays a "Call for Service" fault and/or sends a Call for Service {37} report (per the *Call for Service/System Inactive Options* parameter). The display appears at all keypads in all areas. The report is sent for Area 1 only and follows System Status Report routing.

Press [System Reset] to reset the fault in the area to which the keypad is assigned. Enter 0,0 to disable this parameter.

System Inactive Interval

- **Address:** 0229, 0230
- **Default:** 0,0
- **Selections:** 00 to 99

If an area is not armed (All, Perimeter Only or Partial On) in this interval, the control panel sends a System Inactive {136} Report for that area. A 'System Inactive' Display is optional, see *Call for Service/System Inactive Options* on page 24 for more information.

The interval is in weeks (00 to 99). Enter 0,0 to disable this parameter.

Call for Service/System Inactive Options

- **Address:** 0231
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Call for Service/System Inactive Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options	•															
Call for Service Display at Call for Service Interval		•		•		•		•		•		•		•		•
Call for Service Report at Call for Service Interval			•	•			•	•			•	•			•	•
Call for Service Display at System Inactive Interval					•	•	•	•					•	•	•	•
Enable Weekly Test Reminder									•	•	•	•	•	•	•	•

- **Call for Service Display at Call for Service Interval:** If this option is enabled, the keypad displays a "Call for service" trouble at all keypads in all areas and/or sends a report for Area 1 at the Call for Service Interval. Press the [System Reset] key to reset the fault in the area to which the keypad is assigned. There is no trouble tone for the Call for Service Interval event.
- **Call for Service Report at Call for Service Interval:** If this option is enabled, the Call for Service {37} Report follows System Status routing. The interval is in weeks (00 to 99). See *Call for Service Interval* on page 23.
- **Call for Service Display at System Inactive Interval:** If this option is enabled, the keypad displays a "Call for Service" trouble at all keypads and/or sends a System Inactive {136} report for that area at the System Inactive Interval. See *System Inactive Interval* on page 23.
- **Enable Weekly Test Reminder:** If this option is enabled, the system keypads display "System Test due, Press 1 to test." A reminder is generated eight (8) days after the last user test. There is no trouble tone for this trouble reminder event. When the user presses [#][4] to view the trouble, the system displays "System Test due, Press 1 to test."

Log Supervision Configuration

- **Address:** 0232
- **Default:** 0 (No Log Threshold Events or Reports, No Log Overflow Events or Reports)
- **Selections:**
  - 0 = No Log Threshold Events or Reports, No Log Overflow Events or Reports
  - 1 = Overflow Event & Report {84}; Threshold Event & Report {85} at 50% full
  - 2 = Overflow Event & Report {84}; Threshold Event & Report {85} at 75% full
  - 3 = Overflow Event & Report {84}; Threshold Event & Report {85} at 90% full
  - 4 = Overflow Event; Threshold Event at 50% full; Local Events, No Reports
  - 5 = Overflow Event; Threshold Event at 75% full; Local Events, No Reports
  - 6 = Overflow Event; Threshold Event at 90% full; Local Events, No Reports

The control panel can store up to 254 events in its event log (history). On startup, all of a new control panel's log is available for storing events. As the control panel begins storing events, the capacity for new events is reduced. When Event 254 is stored, the control panel is 100% full. On the 255th event, it begins overwriting events (beginning with the oldest).

RPS Remote Programming Software can access the control panel's log. The history pointer can be reset and the number of events in the history log would be set to 0 (zero).

To help avoid overwriting events that have not been received by RPS, this parameter configures the system for supervision of its event log (history).

Setting this parameter to 0 disables supervision. No log threshold or overflow events are entered in the log. No log reports are sent.

Setting this parameter to 1, 2, or 3 creates log overflow and threshold events in the log. A threshold event is created when the control panel writes the first event to the log that exceeds the threshold (50%, 75%, or 90% full). A threshold report reminds the ARC to access the event log with RPS, freeing log space, before the control panel reaches 100% full (log overflow) and begins overwriting events.

If this parameter is set to 75% threshold, the threshold event reoccurs when 191 new events have occurred since the last history pointer reset.

Overflow events are created when the log reaches 100% of capacity and begins writing over events that have not been received by RPS.

Setting this parameter to 4, 5, or 6 creates the threshold and overflow events, but no reports are sent. The events are local only.

Only log events (threshold and overflow) ever appear in the log. They are not system troubles. They are viewed by pressing [#][8][5], or remotely with RPS.

Resetting the history pointer does not clear any events. The most recent 254 events are always available.

Auto On Alert Time

- **Address:** 0233
- **Default:** 3 (15 min.)
- **Selections:** 0 to 15 (Time = Selection x 5 min.)

Multiply the value entered in this parameter by five (5) min. to determine the duration of the Auto On Alert. The alert sounds before the Auto On Sked to warn users to exit or extend ([#][5][1]) the auto arming.

At the Auto On time, the control panel starts exit delay. See *Sked Parameters* on page 120 for a complete description of the Auto On Skeds.

If the area is armed according to the scheduled arming state (All On or Perimeter Only) during Auto On Alert Time and then disarmed before the scheduled arming, auto arming does not occur.

Cancel Event Enabled

- **Address:** 0234
- **Default:** 0 (No Cancel Reports)
- **Selections:**
  - 0 = No Cancel Reports
  - 1 = Cancel Reports Enabled

If the Cancel Event is enabled (enter Data Digit 1 at Address 0234), a 'Cancel Window' starts with the initiation of alarm events. The Cancel Window is equal to Bell Time. If the user acknowledges the alarm inside the cancel window, a Cancel Event is created. If reporting is enabled, a Cancel {38} or Fire Cancel {39} report is sent.

If the Abort Window is enabled, the Cancel report is not sent if the user acknowledges the alarm before the Abort Window expires. See *Alarm Event Abort Window* on page 106 for more information.

Call for Service Text

- **Address:** 1266 to 1297
- **Default:** Blank
- **Selections:** See *Table 3* on page 7

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

This parameter provides 16 characters of programmable text to be displayed in the second line of the display whenever the first line shows "Call for Service." It is also displayed when the keypad is extinguished and the "Extinguish Mode Displays Date" option is enabled. See *Keypad Response Options* on page 70 for information on the Extinguish Mode options.

The following are possible entries for the second line of text:

- ARC phone number.
- Preferred phone number called for service.
- "Press 0 to view." This tells users which key to press to see system trouble details. See "*Call for Service Details*" in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Tamper Alarm/Trouble Options

- **Address:** 3406
- **Default:** 13
- **Selections:** 0 to 7, 12 to 15

	Enter This Data Digit to Select Options															
Tamper Alarm/Trouble Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Tamper Alarms, no Trouble or Restoral Reports	•															
Tamper Alarm when Armed		•		•		•		•						•		•
Tamper Alarm when Disarmed			•	•			•	•							•	•
Send Tamper Trouble Reports					•	•	•	•					•	•	•	•
Send Tamper Trouble Restoral Reports													•	•	•	•

This parameter configures the control panel's response when tamper alarms occur, and whether tamper trouble and tamper trouble restoral reports are sent. This is a global parameter that applies to both zone and non-zone tampers, system tampers, and device tampers. It does not include user tampers.

- **Tamper Alarm when Armed:** If this option is enabled, a tamper condition that occurs when the control panel is armed creates a tamper alarm response. If this option is disabled, a tamper condition that occurs when the control panel is armed creates a tamper trouble condition.

  When the control panel is armed Perimeter Only or Part On, only some of the controlled zones can create an alarm. If this option is selected and the zone that is tampered is a Perimeter Only or Part On zone, a tamper alarm is created. If the zone is not a Perimeter Only or Part On zone, the tamper response depends on the setting made for the next option (Tamper Alarm when Disarmed). The non-zone tampers are always included in the Perimeter Only or Part On zones and creates a tamper alarm if tampered.
- **Tamper Alarm when Disarmed:** If this option is enabled, a tamper condition that occurs when the control panel is disarmed creates a tamper alarm response. If this option is disabled, a tamper condition that occurs when the control panel is disarmed creates a tamper trouble condition.

  If the control panel is armed Perimeter Only or Part On, the zones that are excluded from the controlled zones respond to the tamper condition as defined by the setting of this option.
- **Send Tamper Trouble Reports:** If this option is enabled, a tamper report {3} is sent to the ARC when a tamper trouble (not alarm) occurs. If this option is disabled, no report is sent.
- **Send Tamper Trouble Restoral Reports:** If this option is enabled, a tamper restoral report {112} is sent to the ARC when a tamper trouble restores. If this option is disabled, no report is sent.

System Alarm Reports/Output Options

- **Address:** 3407
- **Default:** 7
- **Selections:** 0 to 7

	Enter This Data Digit to Select Options															
System Alarm Reports/Output Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No System Tamper Alarm Reports, No Output	•															
Send System Tamper Alarm Reports		•		•		•		•								
Send System Tamper Alarm Restoral Reports				•				•								
Enable System Tamper Alarm Output					•	•		•								
Reserved																

This parameter determines whether tamper alarm and alarm restoral reports are sent, and if the alarm output operates on a tamper alarm. This parameter only applies to non-zone tampers.

- **Send System Tamper Alarm Reports:** If enabled, this option sends an alarm report, such as Data Bus Device Tamper {189} alarm, to the ARC when a non-zone related tamper alarm is generated. Other non-zone tamper alarms include Data Bus Missing Alarm {187}, Data Bus Trouble Alarm {191}, and Siren Missing Alarm {193}.
- **Send System Tamper Alarm Restoral Reports:** If enabled, this option sends an alarm restoral report, such as Data Bus Device Tamper {190} restoral, to the ARC when a non-zone related tamper condition is restored. Other non-zone tamper alarm restorals include Data Bus Missing Alarm Restoral {188}, Data Bus Trouble Alarm Restoral {192}, and Siren Missing Alarm Restoral {194}.
- **Enable System Tamper Alarm Output:** If enabled, this option activates the alarm output when a non-zone related tamper alarm, such as Data Bus Device Tamper alarm, is generated. Other non-zone tamper alarms include Data Bus Missing {187}, Data Bus Trouble Alarm {191}, and Siren Missing Alarm {193}.

4.2.5 Tests

System Test Configuration Options

- **Address:** 0244
- **Default:** 5
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
System Test Configuration Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
System Test Disabled	•															
Test Bell		•		•		•		•		•		•		•		•
Test Strobe			•	•			•	•			•	•			•	•
Test Battery					•	•	•	•					•	•	•	•
Send Test Report									•	•	•	•	•	•	•	•

This is a global (affects all areas) option.

When the user enters the System Test key sequence ([#][4][1]) at the keypad, the system performs a self-test that includes the options selected at this parameter. The configuration applies to all areas.

- **Test Bell:** If enabled, this option makes a "bell test" part of the system test. The control panel activates the Bell Time (1|5) and Alarm Output (1|8, 1|9, 1|10, 1|11, 1|12, and 8|8) functions for three sec. See *Output Parameters* on page 107 for a complete description of output functions.
- **Test Strobe:** If enabled, this option makes a "strobe test" part of the system test. The control panel activates the Strobe Output function (1|6) and waits for the user to press [*] to end the test.

- **Test Battery:** If enabled, this option makes the "battery test" part of the system test. The battery test causes the system to run on battery power only for four min. If the battery voltage falls below 12.1 V during the four-min. test, or if the battery is missing, the system restores AC power and displays a system trouble at all keypads. If programmed for battery reports, the control panel sends a low battery or missing battery report. Press [#] to end the test.
- **Send Test Report:** If enabled, this option makes a "communications test" part of the system test. If selected, this option causes the control panel to attempt to send a Test {137} report when the user initiates a System Test ([#][4][1]). If there is a system trouble present at the time of the test, the control panel sends a Test, Off Normal {138} report. The test report follows the routing for Test Report Routing (Address 0255). If the test communication is unsuccessful, the control panel creates a system trouble communication failure.

System Test Enable Options

- **Address:** 0245
- **Default:**
  - **DS7240V2:** 15
  - **DS7220V2:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
System Test Enable Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
System Test Disabled	•															
Enable System Test for Area 1		•		•		•		•		•		•		•		•
Enable System Test for Area 2			•	•			•	•			•	•			•	•
Enable System Test for Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Enable System Test for Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

This option enables the System Test function ([#][4][1]) for each of the areas. Although the configuration of System Test is global, the function is only enabled for keypads in the areas selected here, and only for users with the proper authority level. See *Authority Level Option 9: System Functions 1* on page 57 for more information.

If the System Test is not enabled in the previous parameter (Address 0244 is set to Data Digit 0), then this parameter is not functional and does not need to be programmed.

Walk Test Configuration Options

- **Address:** 0246
- **Default:** 8
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Walk Test Configuration Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Walk Test Disabled	•															
Start with System Test		•		•		•		•		•		•		•		•
Include Fire Zones			•	•			•	•			•	•			•	•
Include 24-hour Zones					•	•	•	•					•	•	•	•
Include Controlled Zones									•	•	•	•	•	•	•	•

When a user enters the Walk Test key sequence ([#][4][4]) at a keypad to start a walk test, the system includes the option(s) selected in this parameter. If included, the "Start with System Test" option follows its own configuration. See *System Test Configuration Options* on page 28 and *System Test Enable Options* on page 29. No reports are sent from zones included in the test.

If a Zone Function type is not included, those zones remain active during the test.

A Walk Test Start {158} report, with user number, is sent at the start of the test. A Walk Test End {159} report, with User Number 0 (zero), is sent at its conclusion.

Entering Walk Test mode starts a 20-minute timer. After 15 min. with no activity from the included zones, a warning tone (same as Auto-arm warning) begins. After 20 min., the test automatically terminates with User Number 0 (zero).

Any fire or 24-hour zone faulted at the termination of the test generates a trouble response, not an alarm response. If programmed for alarm reports but not trouble reports, trouble reports are sent as part of the trouble response only in this instance.

Walk Test Enable Options

- **Address:** 0247
- **Default:**
  - **DS7240V2:** 15
  - **DS7220V2:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Walk Test Enable Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Walk Test Disabled	•															
Walk Test Enabled for Area 1		•		•		•		•		•		•		•		•
Walk Test Enabled for Area 2			•	•			•	•			•	•			•	•
Walk Test Enabled for Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Walk Test Enabled for Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

Use this parameter to choose which areas have the Walk Test function ([#][4][4]) enabled. Although the configuration of Walk Test is global, the function is only enabled for keypads in the areas selected here, and only for users with the proper authority level. See *Authority Level Option 9: System Functions 1* on page 57 for more information.

Walk Test Start/End Report Routing

- **Address:** 0248
- **Default:** 5 (No reports, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

This is a global (affects all areas) parameter. See "Communication Failure (Comm Fail)" for a description of the Comm Fail event , and "Dialing Attempt Tables" for the dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Automatic Test {137} Report Options

- **Address:** 0249
- **Default:** 0
- **Selections:** 0 to 4, 8 to 12

	Enter This Data Digit to Select Options															
Automatic Test Report Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Automatic Test Report Options	•															
Test Report Only if System is Armed		•		•						•		•				
Defer Test Report if Other Report Sent in Test Interval			•	•							•	•				
Test Reports for All Areas (else Area 1 only)					•								•			
Call RPS at Test Time (after Test Report)									•	•	•	•	•			

Use these options to configure the Automatic Test {137} report. If "Call RPS at Test Time" is enabled, a variety of tasks could be accomplished at this time, including downloading the log to RPS.

- **Test Report Only if System is Armed:** This option sends a test report only if the system is armed.
- **Defer Test Report if Other Report Sent in Test Interval:** If another report is sent during the test interval, this option defers the test report until the end of the test interval.
- **Test Reports for All Areas (else Area 1 only):** If selected, this option generates a test report for all enabled areas. For the DS7240V2, this option applies to Areas 1 through 4. For the DS7220V2, this option applies to Areas 1 and 2.
- **Call RPS at Test Time (After Test Report):** If selected, this option calls RPS at test time after the system sends the test report. The Remote Programming Call Back Phone Number should be programmed. See *Remote Programming Call Back Number* on page 16 for more information.

Automatic Test {137} Report Time

- **Address:** 0250 to 0253
- **Default:** 0000 (Test reports disabled)
- **Selections:** 0 to 9

Enter the time of day for the Automatic Test. Use 24-hour format (HHMM) where midnight is 2400, noon is 1200 and 12:01 am is 0001. Enter one digit in each address so that Addresses 0250 and 0251 are the hour, and 0252 and 0253 are the minute. An entry of 0000 (the default setting) disables the Automatic Test {137} report.

Automatic Test {137} Report Interval

- **Address:** 0254
- **Default:** 3 (7 Days)
- **Selections:**
  - 0 = No Automatic Test
  - 1 = 1 H
  - 2 = 1 Day
  - 3 = 7 Days
  - 4 = 28 Days

Enter zero (0) to disable Automatic Test {137} reporting.

The one-hour interval is incremented on the minute. For example, if you set the Automatic Test Time parameter to 1020 (10:20 am), the Automatic Test Interval is one hour, and left programming mode at 11:10, then the control panel sends a test report at 11:20 am (less than one hour after leaving programming mode). The next test report would come at 12:20 pm.

The one-day, seven-day and 28-day intervals are incremented at midnight (2400). For example, if you set the Automatic Test Time parameter to 1020 (10:20 am), the Automatic Test Interval is one day, and left programming mode at 10:10 am, then the control panel does not send a test report until 10:20 the next day (after the one-day interval increment at midnight).

Test Report Routing

- **Address:** 0255
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

This is a global (affects all areas) parameter.

Test reports include the System Test {137}/{138} reports. The Walk Test Start {158} and Walk Test End {159} reports follow their own routing.

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

4.2.6 Programming Options

Date Format and Enable PIN Trouble

- **Address:** 0235
- **Default:** 1
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
Date Format & Enable PIN Trouble Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
MM/DD/YY Date Display	•		•													
DD/MM/YY Date Display		•		•												
Enable Default PIN Trouble			•	•												
Reserved																
Reserved																

This parameter controls the display of the date on the keypad and logged on the printer.

This parameter can also enable the System Trouble event that is generated if the default values for the Installer PIN and User PIN are left unchanged. See *Installer PIN,* on page 63, and *PIN, User #,* on page 65, for more information.

If the default Installer PIN or the default User 1 PIN is changed using RPS remote programming, reset the control panel at the end of the remote programming session.

Set this parameter to 1 (default) to do the following:

- Use DD/MM/YY date format
- Disable the system trouble message if the Installer PIN and User PIN defaults are not changed

Daylight Saving Time Calendar

- **Address:** 0236
- **Default:** 2 (European DST Calendar)
- **Selections:**
  - 0 = No Options selected
  - 1 = Australian DST Calendar
  - 2 = European DST Calendar
  - 3 = United States DST Calendar

This parameter determines the appropriate calendar for daylight saving adjustments.

- **Australian DST Calendar:** This option moves the clock ahead on the last Sunday in October and moves the clock back on the last Sunday in March.
- **European DST Calendar:** This option moves the clock ahead on the last Sunday in March and moves the clock back on the last Sunday in October.
- **United States DST Calendar:** This option moves the clock ahead on the first Sunday in April and moves the clock back on the last Sunday in October.

Daylight Saving Clock Advance Time

- **Address:** 0238, 0239
- **Default:** 0,2 (02:00 AM)
- **Selections:** 0 to 22

Addresses 0238 and 0239 select the hour that the clock is advanced.

Address 0238 holds the tens digit of the hour and Address 0239 holds the ones digit of the hour. When the local time of the control panel matches the value entered in Addresses 0238 and 0239, an hour is added to the time. To advance the clock at midnight when the day changes from Saturday to Sunday, enter a 0 (zero) in Addresses 0238 and 0239.

Daylight Saving Clock Reverse Time

- **Address:** 0240, 0241
- **Default:** 0,3 (03:00 AM)
- **Selections:** 1 to 23

Addresses 0240 and 0241 select the hour that the clock is reversed.

Address 0240 holds the tens digit of the hour and Address 0241 holds the ones digit of the hour. When the local time of the control panel matches the value entered in Addresses 0240 and 0241, an hour is subtracted from the time.

AC Fail Report Delay

- **Address:** 0242, 0243
- **Default:** 7, 8 (120 min.)
- **Selections:** 0,0 to 15,15 (0 to 255 min.)

This parameter sets the number of min. (0-255) the control panel waits before sending an AC Failure report when an AC Failure is detected. If this parameter is set to 0 (zero), there is no delay and the report is sent immediately. If the AC Failure condition still exists at the end of the delay period, it is logged and the report is sent. If programmed, the AC Failure output function activates when the event is logged. If AC is restored before the delay period ends, the event is not logged and the report is not sent. If AC restoral reports are enabled, the reports are only sent if an AC Failure report has been sent. The restoral report is sent without delay.

Addresses 0242 and 0243 must be programmed when setting the AC Fail Report Delay. The system multiplies the entry made in Address 0242 by 16 and adds it to the entry made in Address 0243. For example, to set the AC Fail Report Delay time to 50 min., you would enter "3" in Address 0242 (3 x 16 = 48) and then enter "2" in Address 0243 (48 + 2 = 50). Use the formula below to calculate the delay time for this parameter.

3 (Address 0242) x 16 = 48 + 2 (Address 0243) = 50 (AC Fail Report Delay Time)

See below for commonly used time settings.

- 0,10 = 10 min. (**0** x 16 = 0 + **10** = **10 min.**)
- 1,14 = 30 min. (**1** x 16 = 16 + **14** = **30 min.**)
- 2,13 = 45 min. (**2** x 16 = 32 + **13** = **45 min.**)
- 3,12 = 60 min. (**3** x 16 = 48 + **12** = **60 min.**)
- 5,10 = 90 min. (**5** x 16 = 80 + **10** = **90 min.**)
- 7,8 = 120 min. (**7** x 16 = 112 + **8** = **120 min.**)

Remote Programming Options

- **Address:** 0256
- **Default:** 1
- **Selections:** 0, 1, 3, 5, 7

	Enter This Data Digit to Select Options															
Remote Programming Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Disable Remote Programming	•															
Enable Remote Programming		•		•		•		•								
Enable Remote Programming Callback				•				•								
Terminate Remote Programming Session on Alarm						•		•								
Reserved																

- **Enable Remote Programming:** If this option is enabled, the system answers the phone at the programmed ring count for remote programming sessions. [#][4][3] can also be used to start a remote programming session or answer the phone if Address 0213 is set to 0. See *RPS Answer Ring Count, Answering Machine Bypass* on page 17.
  - If the programming session is completed successfully, the control panel sends a Valid Remote Access {103} report.
  - If you change the control panel parameters during the programming session, it sends a Parameters Changed {98} report.
  - If the programming session is terminated with a 'reset panel' from RPS, the control panel sends a Reboot {104} report.
  - If the programming session is not successfully completed, the control panel sends an Invalid Remote Access {102} report.

Select the "Enable Remote Programming" option to ensure that the following options operate properly.

- **Enable Remote Programming Callback:** If this option is enabled, the system answers the phone at the programmed ring count for remote programming sessions. If it determines that the remote programmer is calling, it disconnects and calls the remote programmer back using the programmed call-back phone number/IP address (*Remote Programming Call Back Number* on page 16). When this is enabled, [#][4][3] can also be used to start a programming session. When a user presses [#][4][3] at the keypad, the control panel calls RPS. If the callback to RPS is not successful, it sends a Bad Call {101} report.
- **Terminate Remote Programming Connection on Alarm:** If this option is enabled, an alarm on any zone or any keypad terminates the remote programming session.

Local Programming Options

- **Address:** 0257
- **Default:** 12
- **Selections:** 0, 1, 4, 5, 8, 9, 12, 13

	Enter This Data Digit to Select Options															
Local Programming Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Enable Installer Mode Reports		•				•				•				•		
Reserved																
Keypad Programming Enabled					•	•							•	•		
PK32 (Programming Key) Enabled									•	•			•	•		

- **Enable Installer Mode Reports:** If this option is enabled, the control panel sends the following events: Installer Mode Start {82}, Installer Mode End {83}, and Parameters Changed {98}. If this option is disabled, these events are only entered in the control panel's history log.
- **Keypad Programming Enabled:** If this option is enabled, all control panel parameters can be programmed from any system text keypad or an Installer Keypad. See "Installer Keypad" and "Installer Mode" in the *DS7200V2 Installer's Guide* (P/N: 4998153893).
- **PK32 (Programming Key) Enabled:** If this option is enabled, the PK32 Programming Key can send or receive a program record (the control panel's parameter settings). See "Programming Key (PK32)" in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

If the "Keypad Programming Enabled" and the "PK32 (Programming Key) Enabled" options are both disabled, you cannot access the control panel's programming mode from a keypad. You can still program the control panel from RPS.

4.2.7 Global Open/Close Options

Arming Options 1

- **Address:** 0258
- **Default:** 0
- **Selections:** 0 to 7

	Enter This Data Digit to Select Options															
Arming Options 1	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Enabled	•															
Enable All On-No Exit		•		•		•		•								
Answering Machine Bypass only when All/Perimeter Only On			•	•			•	•								
Remote Arming with Telephone, Area 1					•	•	•	•								
Reserved																

- **Enable All On-No Exit:** If this option is enabled and the system is turned All On and no Entry/Exit Delay zones are faulted during Exit Delay, the system automatically shifts to Perimeter Only. Perimeter Only (not All On) appears in the log and reports. This option can only be used if the control panel is armed with delay. This option does not apply when arming with keyswitches or RF keyfobs.
- **Answering Machine Bypass Only When All On/Perimeter Only On:** If this option is enabled, the Answering Machine Bypass function is activated at *RPS Answer Ring Count, Answering* Machine Bypass parameter (see page 17). If activated there, this option can be used to restrict its function so that it only operates when the system is All On or Perimeter Only On. The system does not answer if disarmed.
- **Remote Arming with Telephone, Area 1:** If enabled, this option controls the built-in telephone arming feature for Area 1. When enabled, the control panel answers the phone on the ring count for remote programming. The following occurs when the control panel answers the phone:
  - If the control panel is All On or Perimeter Only On, it sounds three beeps and starts the handshake tone for remote programming.
  - If the control panel is Off, it sounds one short beep, waits approximately three sec and then starts the handshake tone for remote programming (one long beep). Press and hold [5] for two sec immediately after the first short arming beep and before the handshake tone begins.

    If arming from a cell phone, quickly press [5] three times. If pressing and holding [5] for two sec from a house (landline) phone does not produce a tone long enough to arm Area 1, retry by quickly pressing [5] three times.
  - The control panel arms if it detects a [5] key press from the telephone (All On with Delay, faulted zones are force-armed like keyswitch arming). The control panel sounds three beeps (new armed state) and then hangs up.

You cannot use a telephone to disarm the control panel.

Arming Options 2

- **Address:** 0259
- **Default:** 12
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Arming Options 2	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Enabled	•															
First Area to Open/Last Area to Close Reporting		•		•		•		•		•		•		•		•
Make Area 1 Common Area			•	•			•	•			•	•			•	•
Enable All Areas All On ([#][8][0])					•	•	•	•					•	•	•	•
Enable All Areas All Off ([#][8][1])									•	•	•	•	•	•	•	•

- **First Area to Open {164}/Last Area to Close {165} Reporting:** If this option is enabled, the system sends one Closing {165} report when all areas are turned On and one Opening {164} report when any area is turned Off. Opening/Closing reports must be enabled for all areas.

Enabling the "Restrict Open/Close Reports" option overrides the "First Area to Open/Last Area to Close Reporting" option. See *Area # Opening {89-96}/Closing {42-67} Reporting Options* on page 49 for more information on the "Restrict Open/Close Reports" option.

All area account numbers must be the same in order to send Area 1's account numbers. See *Area Wide Parameters* on page 48 for account number programming instructions.

- **Make Area 1 Common Area:** If this option is enabled, all other areas are made common to Area 1. Area 1 arms when all the other areas are armed All On, and Area 1 disarms when any other area is disarmed.
- **Enable All Areas All On ([#][8][0]):** If this option is enabled, all areas arm when a user enters [#][8][0]. Faulted zones are force-armed. Enable all areas in which the user has the appropriate authority level.
- **Enable All Areas Off ([#][8][1]):** If this option is enabled, all areas disarm when a user enters [#][8][1]. This function always requires a PIN. Enable all areas in which the user has the appropriate authority level.

Bypass/Force Arm Limit

- **Address:** 0260
- **Default:** 7
- **Selections:** 0 to 15

The parameter configures all areas.

This parameter sets the maximum number of zones that can be force-armed or bypassed for any one area. The area does not arm if the number of faulted zones exceeds this limit.

Entering zero (0) allows an unlimited number of zones to be force-armed or bypassed.

The Zone Function determines which zones are bypassable.

Open/Close Reporting Options

- **Address:** 0261
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Open/Close Reporting Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Open, Close, Exit Error, or Recent Close Reports	•															
Opening {89-96, 164} Reports Enabled		•		•		•		•		•		•		•		•
Closing {42-67, 165} Reports Enabled			•	•			•	•			•	•			•	•
Exit Error {18} Report Enabled					•	•	•	•					•	•	•	•
Recent Closing {19-20} Reports Enabled									•	•	•	•	•	•	•	•

This is a global parameter that affects all zones, all areas, and all PINs.

Opening and Closing reports can be restricted by area (see *Area # Opening* {*89-96*}/*Closing* {*42-67*} *Reporting Options* on page 49) and by Authority Level once they are enabled and configured here. Reporting must be enabled at the system level first (see *Global Reporting Options* on page 19).

- **Opening Reports Enabled:** If selected, this option enables Opening {89 to 96, 164} reports.
- **Closing Reports Enabled:** If selected, this option enables Closing {42 to 67, 165} reports.
- **Exit Error:** Only the Exit Error {18} report is enabled and disabled by this option. If an Entry/Exit Delay zone (Zone Function Types 11 and 12) is violated at the end of Exit Delay, these events occur in this order:
  1. Local alarm annunciation is started (keypads and alarm outputs).
  2. Entry Delay starts.
  3. The alarm report process begins if the system is not turned off at the end of Entry Delay. An Exit Error {18} report is included if programmed. The Exit Error report follows the Alarm Report routing.
- **Recent Closing:** If this option is enabled, an Alarm Recent Closing {19 to 20} report (including the user number) is sent for any alarm within 2 min. of the end of Exit Time.

Opening/Closing Report Routing

- **Address:** 0262
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

This is a global parameter that affects all zones, all areas, and all PINs.

The Exit Error {18} and Recent Closing {19 to 20} reports follow alarm routing. See "Communication Failure (Comm Fail)" for a description of a Comm Fail event and "Dialing Attempt Tables" for a description of the dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

Exit Time Restart

- **Address:** 0263
- **Default:** 1 (Exit Time Restart)
- **Selections:**
  - 0 = No Exit Time Restart
  - 1 = Exit Time Restart

If Exit Time Restart is set to Restart (1), a violation, restoral, and second violation of an Entry/Exit Delay zone (before the end of Exit Delay) restarts Exit Delay. One restart is allowed per arming cycle. A violation, restoral, and second violation must all occur at the same Entry/Exit zone.

Entry Delay Time 1 (2)

- **Address:**
- **Entry Delay Time 1:** 0264, 0265
- **Entry Delay Time 2:** 0266, 0267
- **Default:**
  - **Entry Delay Time 1:** 1,14 (30 sec)
  - **Entry Delay Time 2:** 7,8 (120 sec)
- **Selections:** 0,0 to 15,15 (0 to 255 sec)

Entry Delay is the time the system allows the user to turn the system off before an alarm initiates.

If the user fails to turn off the system before Entry Delay expires, an alarm event occurs. Users must enter through a zone programmed for Entry Delay to start the Entry Delay timer.

The control panel provides two Entry Delays. Only zone function types programmed to initiate Entry Delay 1 use the entry delay time you set at the Entry Delay Time 1 parameter. Zone function types programmed to initiate Entry Delay 2 use the entry delay time you set at the Entry Delay Time 2 parameter.

If the system is on and a user enters through a zone assigned to Entry Delay 2, the system initiates Entry Delay 2. If the user enters through a zone assigned to Entry Delay 1, and then through a zone assigned to Entry Delay 2, the system does not switch from Entry Delay 1 to Entry Delay 2.

The system sounds an entry delay tone at the area's keypad during Entry Delay.

Programming two addresses for each sets the Entry Delay Time 1 and Entry Delay Time 2 parameters. The system multiplies the entry in the first address by 16 and adds it to the entry in the second address. For example, to set Entry Delay Time 1 to 50 sec, you would enter 3 in the first address (3 x 16 = 48), and then enter 2 in the second address (48 + 2 = 50). Use the formula below to calculate the delay time for programming this parameter.

3 (Address 0264) x 16 = 48 + 2 (Address 0265) = 50 (Entry Delay Time)

See below for commonly used time settings.

- 0,10 = 10 sec (**0** x 16 = 0 + **10** = **10 sec**)
- 1,14 = 30 sec (**1** x 16 = 16 + **14** = **30 sec**)
- 2,13 = 45 sec (**2** x 16 = 32 + **13** = **45 sec**)
- 3,12 = 60 sec (**3** x 16 = 48 + **12** = **60 sec**)
- 5,10 = 90 sec (**5** x 16 = 80 + **10** = **90 sec**)
- 7,8 = 120 sec (**7** x 16 = 112 + **8** = **120 sec**)
- 15,0 = 240 sec (**15** x 16 = 240 + **0** = **240 sec**)

Perimeter Only Mode Delay Time

- **Address:** 0268, 0269
- **Default:** 0,0 (use assigned Entry Delay)
- **Selections:** 0,0 to 15,15 (0 to 255 sec)

Making an entry in the Perimeter Only Mode Delay Time parameter creates an Entry Delay time that only applies when the system is armed Perimeter Only.

If the system is Perimeter Only or Partial On and any armed zone is faulted (fire and 24-hour zones excluded), the system starts a Perimeter Only Mode Entry Delay timer. It uses this Perimeter Only Mode timer for zones that are assigned to either Entry Delay 1 or Entry Delay 2, and zones that are not assigned Entry Delay.

Setting the Perimeter Only Mode Delay Time to zero (0, 0) disables Perimeter Only Mode delay. When the system is turned on Perimeter Only and 0,0 is entered for Perimeter Only Mode Delay Time, the armed entry zones follow the Entry Delay assigned to them (Entry Delay 1 or Entry Delay 2).

Programming two Addresses sets the Perimeter Only Mode Delay Time. The system multiplies the number entered in the first Address by 16 and adds that total with the number entered in the second Address. For example, to set Perimeter Only Mode Delay Time 1 to 50 sec, you would enter 3 in the first Address (3 x 16 = 48) and then enter 2 for the second Address (48 + 2 = 50). Use the formula below to calculate the delay time for programming this parameter.

3 (Address 0268) x 16 = 48 + 2 (Address 0269) = 50 (Perimeter Only Delay Time)

See *Entry Delay Time 1 (2)* on page 41 for a list of commonly used time settings.

Exit Delay Time 1 (2)

- **Address:**
  - **Exit Delay Time 1:** 0270, 0271
  - **Exit Delay Time 2:** 0272, 0273
- **Default:**
  - **Exit Delay Time 1:** 3,12 (60 sec)
  - **Exit Delay Time 2:** 7,8 (120 sec)
- **Selections:** 0,0 to 15,14 (0 to 254 sec)

Exit Delay is the time the system allows users to exit the premises. Users must leave the premises before Exit Delay expires.

The control panel provides two Exit Delays. When a user turns the system All On or Perimeter Only On with Delay, the system always starts Exit Delay 1. Exit Delay is set to the time you enter at the Exit Delay Time 1 parameter.

If a zone assigned to Exit Delay 2 is faulted when Exit Delay is running, the system switches from Exit Delay 1 to Exit Delay 2 (the time you enter at the Exit Delay Time 2 parameter).

If a user force-arms an Exit Delay 2 zone, the system uses Exit Delay 2 and Entry Delay 2.

Programming two Addresses for each parameter sets Exit Delay Time 1 and Exit Delay Time 2. The system multiplies the number entered in the first Address by 16 and adds that total with the number entered in the second Address. For example, to set Exit Delay Time 1 for 50 sec, you would enter 3 in the first Address (3 x 16 = 48) and then enter 2 for the second Address (48 + 2 = 50). Use the formula below to calculate the delay time for programming this parameter.

$$3\ (\text{Address } 0270) \times 16 = \underline{48} + 2\ (\text{Address } 0271) = 50\ (\text{Entry Delay Time})$$

See *Entry Delay Time 1 (2)* on page 41 for a list of commonly used time settings.

See *Contact Set/Exit Delay Cancel Zone Options* on page 45 and *Exit Terminator Zone Options* on page 45 for additional Exit Delay options.

If Exit Delay 1 or 2 is set to 0 (zero), the area arms instantly (no Exit Delay) in the following conditions:

Arming All On:

- Both Contact Set and Exit Terminator buttons are disabled for the area.
- Arming form a Sked, keyswitch, telephone, keyfob, or RPS.

Arming Perimeter Only or Partial On: The are arms instantly – there is no Exit Delay.

Arming from a wired keypad: If either Contact Set or Exit Terminator button (or both) is enabled for the area and Exit Delay is set to 0 (zero), Exit Delay is disabled. The keypad does not show a countdown. The control panel does not arm until the criteria for the Contact Set or Exit Terminator is met.

Tamper Reset/Arming Options

- **Address:** 3408
- **Default:** 3
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
Tamper Reset/Arming Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Tamper Reset/Arming Options	•															
Allow User Reset of Tampers/Troubles		•		•												
Allow Force Arming of Tampers/Troubles			•	•												
Reserved																
Reserved																

This parameter enables user reset of a tamper or trouble condition and force arming of the control panel when a tamper or trouble condition exists.

- **Allow User Reset of Tampers/Troubles:** If enabled, this option allows a user with the appropriate authority level to reset tamper and major trouble conditions. Enable *Authority Level Option 9: System Functions 1* (page 57) and *Authority Level Option 10: System Functions 2* (page 58) for each user who can reset tamper and trouble conditions.

The following conditions are treated as major trouble conditions:

  - 24-hour zone missing (DX2010 Data Bus device missing)
  - Controlled zone missing (DX2010 Data Bus device missing)
  - Low or missing system battery
  - Telephone line fail (if programmed for user reset)
  - Alternate communication path fault (if programmed for user reset)
  - 24-hour zone trouble (zone programmed for trouble, not alarm)
  - Controlled zone trouble (zone programmed for trouble, not alarm)

- **Allow Force Arming of Tampers/Troubles:** If enabled, this option allows a user with the appropriate authority level to force arm the control panel when a tamper or major trouble condition exists. Enable *Authority Level Option 7: Force Arm/Bypass* (page 56) for each user who can force arm the system when a tamper or trouble condition occurs. If the tamper or trouble is zone-related, the zone function configuration must have the "Can Be Bypassed or Force Armed" options enabled (see *Options 2, Zone Function ##* on page 99).

Contact Set/Exit Delay Cancel Zone Options

- **Address:** 3409
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Contact Set/Exit Delay Cancel Zone Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Contact Set Arming	•															
Enable Contact Set in Area 1		•		•		•		•		•		•		•		•
Enable Contact Set in Area 2			•	•			•	•			•	•			•	•
Enable Contact Set in Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Enable Contact Set in Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

This parameter selects which areas arm when an Entry/Exit Delay zone restores during Exit Delay and all zones are normal. Each area can be individually selected to arm on contact (Exit Delay cancel zone).

Contact Set only applies when turning the system All On. If the system is turned Perimeter Only or Partial On, the control panel only arms at the end of Exit Delay. When any Entry/Exit Delay zone (either Type 1 or Type 2) goes from its alarm (off-normal) condition to normal, and all other zones in the area are normal or bypassed, Exit Delay is terminated and the control panel is armed.

If a zone is faulted when the Exit zone restores, the restoral is ignored. Entry/Exit zones may or may not be bypassed. If all Entry/Exit zones are bypassed and the Exit Delay time is set to 0 (disabled), the control panel cannot be armed All On.

Exit Terminator Zone Options

- **Address:** 3410
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Exit Terminator Zone Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Terminator Arming	•															
Enable Exit Terminator Arming in Area 1		•		•		•		•		•		•		•		•
Enable Exit Terminator Arming in Area 2			•	•			•	•			•	•			•	•
Enable Exit Terminator Arming in Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Enable Exit Terminator Arming in Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

This parameter selects which areas arm when an exit terminator button is assigned to that area. Each area can be individually selected to arm on the activation of an exit terminator button.

Each button only arms the area to which its zone is assigned.

When Exit Delay is active, all zones are normal, and the exit terminator button is pressed, the control panel arms immediately (see *Location ##, Zone Function* on page 84 for more information). The exit terminator button applies only to All On arming, and is assigned a specific zone function. If the control panel is turned Perimeter Only or Partial On, it only arms at the end of Exit Delay. If a zone is faulted when the button is pressed, the button is ignored.

Panel Arming Options

- **Address:** 3411
- **Default:** 0
- **Selections:** 0 to 7

	Enter This Data Digit to Select Options															
Panel Arming Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Panel Arming Options	•															
Enable Bad Set Operation		•		•		•		•								
Panel is Disarmed during Exit Delay			•	•			•	•								
Start Exit Delay with Faulted Zones					•	•	•	•								
Reserved																

This is a global parameter. Use it to select several different control panel arming options.

- **Enable Bad Set Operation:** If this option is selected, a "bad set" occurs when the Exit Delay timer expires, and a zone is still faulted. The control panel does not arm. When a bad set occurs, all keypads in the area sound the Last Chance tone.

  The LCD keypad displays a "Failed to Arm" message and then prompts for a valid PIN to clear the display. The LED keypad sounds the Last Chance tone and the Status LED flashes fast to indicate that a PIN entry is required. Any control panel output configured for Bad Set activates when the bad set is detected and resets when the PIN is entered.

  When the bad set occurs, the Bad Set event {185} is placed in the log. This event follows the Opening/Closing Report routing.

  If this option is not selected, the control panel arms when the Exit Delay timer expires. A faulted zone triggers an alarm response.

- **Panel is Disarmed during Exit Delay:** If this option is selected, the control panel remains disarmed until Exit Delay is terminated. Controlled zones may be faulted, but do not cause alarms. Any zone type that causes a trouble condition when the control panel is disarmed, or causes an alarm condition when the control panel is armed, only creates a trouble condition. The armed LED on the keypads does not light until the Exit Delay is terminated.

  If this option is not selected, the control panel is "armed" at the start of Exit Delay. Instant controlled zones cause an alarm if faulted. Any zone trouble that causes an alarm condition when the control panel is armed creates an alarm condition. The armed LED on the keypads lights when Exit Delay starts.

- **Start Exit Delay with Faulted Zones:** If this option is selected, any faulted Entry/Exit zones or Follower zones are ignored. The control panel proceeds with arming the area. If the zones are still faulted at the end of Exit Delay, the control panel then generates the appropriate response. The keypad displays "Not Ready" when a zone is faulted even though this option is selected. Instant zones always prevent control panel arming if faulted.

  If this option is not selected, any faulted zone in the set of zones to be armed prevents the area from arming. The area must be force armed, or the faulted zones must be bypassed or restored.

Verified Alarm Timer

- **Address:** 3412, 3413
- **Default:** 1,14 (30 min.)
- **Selections:**
  - 0,0 (Disabled)
  - 1,14 (30 min.) to 3,12 (60 min.)

This parameter sets the time for the Verified Alarm Timer. The amount of time entered in this parameter defines the window of time in which two independent alarms must occur for the control panel to declare a verified alarm. See the Glossary on page 148 for a definition of Verified Alarm.

Addresses 3412 and 3413 must be programmed when setting the Verified Alarm Timer. The system uses the following formula to set the Verified Alarm Timer:

Address 3412 entry x 16 + Address 3413 entry = Verified Alarm Timer setting

For example, use the following steps to set the Verified Alarm Timer to 30 min.:

1. Enter "1" in Address 3412 (1 x 16 = 16).
2. Enter "14" in Address 3413 (16 + 14 = 30).

An entry of 0,0 disables the Verified Alarm Timer and Verified Alarm operation. Values from 1 to 29 operate as 30 min.. Values from 30 to 60 operate as entered (for example, with an entry of 31, the control panel declares a verified alarm if two independent alarms occur within 31 min.). Values greater than 60 operate as 60 min..

See below for commonly used time settings:

- 1,14 = 30 min. (**1** x 16 = 16 + **14 = 30 min.**)
- 2,13 = 45 min. (**2** x 16 = 32 + **13 = *45* min.**)
- 3,12 = 60 min. (**3** x 16 = 48 + **12 = 60 min.**)

4.3 Area Wide Parameters

The parameters in this section configure the control panel's areas. Each area has 16 characters of programmable text for an area name and 16 characters of programmable area idle text, which appear on the LCD Keypad display.

The DS7240V2 supports up to four areas. The DS7220V2 supports up to two areas.

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

Area # Account Number

- **Address/Default:** See *Table 8*
- **Selections:** 0 to 15 (see *Table 9*)

Table 8: Account Number Addresses/Defaults

Area	Account # for Routing Destination 1	Account # for Routing Destination 2	Default Account # (for both destinations)
1	Address 0276 to 0281	Address 0286 to 0291	10, 10, 10, 10, 0, 0
2	Address 0298 to 0303	Address 0308 to 0313	10, 10, 10, 10, 0, 0
3 (DS7240V2 only)	Address 0320 to 0325	Address 0330 to 0335	10, 10, 10, 10, 0, 0
4 (DS7240V2 only)	Address 0342 to 0347	Address 0352 to 0357	10, 10, 10, 10, 0, 0

Table 9: Account Number Entry Selections

For this Selection	Press this Key		For this Selection	Press this Key
0	10		8	8
1	1		9	9
2	2		B	11
3	3		C	12
4	4		D	13
5	5		E	14
6	6		F	15
7	7		Terminate	0

Each area uses the account number entered here to report to the ARC receiver. Different account numbers can be programmed for two routing destinations. See *Routing Destinations* on page 9 for a complete description of how the control panel directs reports to the routing destinations.

Account numbers can contain up to six (6) digits. If less than four digits are entered, the control panel adds zeros to the end to make a four-digit account number.

The control panel automatically truncates the account number to the maximum length supported by that format. See *Control Panel Events and Reporting Formats* on page 138 for a complete description of the reporting formats available to the control panel.

One account number digit occupies each address. Use a zero (0) to terminate the account number entry if it is less than six digits in length.

For example, to set an account number of 1234, enter 1 2 3 4 0 (0 = Terminate).

Use "10" ([1][0] from the keypad) to enter "0." Use "0" to terminate the account number.

Area # Opening {89-96}/Closing {42-67} Reporting Options

- **Address:**
  - **Area 1:** 0296
  - **Area 2:** 0318
  - **Area 3 (DS7240V2 only):** 0340
  - **Area 4 (DS7240V2 only):** 0362
- **Default:** 1
- **Selections:** 0, 1, 3, 5, 7, 9, 11, 13, 15

	Enter This Data Digit to Select Options															
Area # Open/Close Reporting Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Open or Close Reports for Area #	•															
Open/Close Reports (for All On) for Area # Enabled		•		•		•		•		•		•		•		•
Restrict Open/Close Reports; Open after Alarm, Close on Force Arm				•				•				•				•
Open/Close Reports for Perimeter Only (and Partial On) Mode – Must also select Open/Close Reports (for All On)						•		•						•		•
1 Second Bell Test on Closing Rpt Acknowledgement										•		•		•		•

- **Open/Close Reports for Area # Enabled:** If enabled, this option configures Opening/Closing reports for each area. This also includes the report for the Extend Auto Closing {21} event. Opening {89 to 96} and Closing {42 to 67} reports must be enabled at the system level. Opening and Closing reports are also enabled by authority level. Reporting must also be enabled at the system level (see *Global Reporting Options* on page 19).
- **Restrict Open/Close Reports; Open From Alarm, Close on Force Arm:** If this option is enabled, the control panel only sends opening reports when the user disarms the system after an alarm and when Bell Time has expired. The control panel only sends closing reports when a zone is force-armed. Force arming is set by authority level and by zone function configuration.

Enabling the "Restrict Open/Close Reports" option overrides the "First Area to Open/Last Area to Close Reporting" option. See *Arming Options 2* on page 38 for more information on the "Restrict Open/Close Reports" option.

- **Open/Close Reports for Perimeter Only Mode:** If this option is enabled, the control panel sends closing reports when users arm the system Perimeter Only. If any zones are bypassed, bypass reports are also sent. The control panel sends opening reports when users disarm the system. Perimeter Only arming is set by authority level and by Zone Function configuration.
- **1 Second Bell Test on Closing Ack:** If this option is enabled, outputs assigned to Alarm Output Functions 1|8, 1|9, 1|10, and 8|8 activate for one sec. See *Function, Output ##* on page 112 for output function descriptions.

Lock Area # Reporting

- **Address:**
  - **Area 1:** 0297
  - **Area 2:** 0319
  - **Area 3 (DS7240V2 only):** 0341
  - **Area 4 (DS7240V2 only):** 0363
- **Default:** 0 (Lock Area Disabled)
- **Selections:**
  - 0 = Lock Area Disabled
  - 1 = Lock Area Reports to Routing Destination 1
  - 2 = Lock Area Reports to Routing Destination 2

This parameter locks area reporting to either Routing Destination 1 or Routing Destination 2. If you enable this parameter for an area, all reports for that area are sent to the selected destination. Routing parameters for the individual reports are ignored.

For example, if you set this parameter to 1, all reports in the area are sent to Destination 1. If you set this parameter to 2, all reports in the area are sent to Destination 2.

Area Name Text

- **Address:**
  - **Area 1 Name:** 1394 to 1425
  - **Area 2 Name:** 1458 to 1489
  - **Area 3 Name (DS7240V2 only):** 1522 to 1553
  - **Area 4 Name (DS7240V2 only):** 1586 to 1617
- **Default:**
  - **Area 1:** Area 1 Name Text
  - **Area 2:** Area 2 Name Text
  - **Area 3 (DS7240V2 only):** Area 3 Name Text
  - **Area 4 (DS7240V2 only):** Area 4 Name Text
- **Selections:** See *Key/Character* selection chart

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

Enter up to 16 characters to describe each area.

Key	Character
0	+ - 0 * / \ [ ] = > < # §
1	Space . 1 ? ! , @ _ & ~ : ; " ( ) ' ¿ ¡ % £ $ ¥
2	A B C a b c 2 Å Ä Ã å ä á à â ã α β Ç ç
3	D E F d e f 3 É Æ ë é è ê æ Δ Φ δ ε
4	G H I g h I 4 ï í î ì Γ γ η ι
5	J K L j k l 5 Λ κ λ
6	M N O m n o 6 Ö ö Ñ ñ Ø Õ ø ó ò ô õ Ω μ v ω
7	P Q R S p q r s 7 Π Σ π ρ σ
8	T U V t u v 8 Ü ü ú ù û Θ Y θ τ υ
9	W X Y Z w x y z 9 ÿ Ξ Ψ ξ χ ψ ζ
*	Moves to the address before the text block.
#	Moves to the address after the text block.
A	Moves cursor to the previous character position in text block.
C	Moves cursor to the next character position in text block.

The following keys are not used in text programming and produce an error tone when pressed: [On], [Off], [Perimeter Only], [No Entry], [Bypass], [System Reset], and [B].

Press [1] once to clear a character space or to enter a blank space.

Area Idle Text

- **Address:**
  - **Area 1 Idle Text:** 1426-1457
  - **Area 2 Idle Text:** 1490-1521
  - **Area 3 Idle Text (DS7240V2 only):** 1554-1585
  - **Area 4 Idle Text (DS7240V2 only):** 1618-1649
- **Default:** Not Ready
- **Selections:** See *Key/Character* selection chart

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

This parameter provides 16 characters of programmable text for each area displayed when the system is idle (no alarms, no troubles, system disarmed).

Key	Character
0	+ - 0 * / \ [ ] = > < # §
1	Space . 1 ? ! , @ _ & ~ : ; " ( ) ' ¿ ¡ % £ $ ¥
2	A B C a b c 2 Å Ä Ã å ä á à â ã α β Ç ç
3	D E F d e f 3 É Æ ë é è ê æ Δ Φ δ ε
4	G H I g h I 4 ï í î ì Γ γ η ι
5	J K L j k l 5 Λ κ λ
6	M N O m n o 6 Ö ö Ñ ñ Ø Õ ø ó ò ô õ Ω μ v ω
7	P Q R S p q r s 7 Π Σ π ρ σ
8	T U V t u v 8 Ü ü ú ù û Θ Y θ τ υ
9	W X Y Z w x y z 9 ÿ Ξ Ψ ξ χ ψ ζ
*	Moves to the address before the text block.
#	Moves to the address after the text block.
A	Moves cursor to the previous character position in text block.
C	Moves cursor to the next character position in text block.

The following keys are not used in text programming and produce an error tone when pressed: [On], [Off], [Perimeter Only], [No Entry], [Bypass], [System Reset], and [B].

Press [1] once to clear a character space or to enter a blank space.

If the "Don't Show Zone Status on Keypads" option is not enabled in the *Keypad # Options* parameter (page 67), the text keypad displays "OK for All On" or "OK for Perimeter" across the second line. This indicates that all zones are normal and the system is ready to arm All On or Perimeter Only. If a controlled zone is faulted, the area idle text for this zone's assigned area replaces the "OK for All On/OK for Perimeter" message.

If a zone not configured for Perimeter Only arming is faulted, "OK for Perimeter" replaces "OK for All On" on the text keypad's display. The system might be armed Perimeter Only, but cannot be armed All On until the faulted zone is restored.

If the "Don't Show Zone Status on Keypads" option is enabled, the area idle text displays continuously on the second line when the keypad is idle (even if a zone is faulted).

If the "Don't Show Zone Status on Keypads" option is selected, the default Area Idle Text ("Not Ready") should be changed. See *Text Entry Addresses* on page 7 for text entry instructions.

4.4 User Interface

4.4.1 Authority Level Configuration

The Authority Level determines which functions are available to system users. Each user is assigned an authority level. Use the parameters in this section to configure each of the four authority levels available in the control panel.

Authority Level Option 1: All On Arming

- **Address:** 0364
- **Default:** 15
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 1: All On Arming	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required (Quick Arm)	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- [#][1]: All On with Entry Delay
- [#][1]: All On with Entry Delay, No Exit Tone*
- [#][1]: All On with No Entry Delay
- [On] Key: All On with Entry Delay
- [On] Key: All On with Entry Delay, No Exit Tone*
- [On] Key: All On with No Entry Delay

* Exit Time is doubled (up to 254 sec) when arming the system All On with Entry Delay, Silent (no Exit Tone).

If a PIN is required and not entered, the system asks for one after the function is entered.

To enable the "Quick Arm" feature, set Authority Level Option 1 to 0. A user PIN entry is not required for All On arming.

Authority Level Option 2: Perimeter Only Arming

- **Address:** 0365
- **Default:** 15
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 2: Perimeter Only Arming	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required (Quick Arm)	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- [#][2]: Perimeter Only with Entry Delay
- [#][2]: Perimeter Only with Entry Delay, No Exit Tone*
- [#][2]: Perimeter Only with No Entry Delay
- [Perimeter Only] Key: Perimeter Only with Entry Delay
- [Perimeter Only] Key: Perimeter Only with Entry Delay, No Exit Tone*
- [Perimeter Only] Key: Perimeter Only with No Entry Delay

If a PIN is required and not entered, the system asks for one after the function is entered.

Zones must be configured for Perimeter Only arming. See *Options 1, Zone Function* ## on page 95.

* Exit Time is doubled (up to 254 sec) when arming the system Perimeter Only with Delay, Silent (no Exit Tone).

To enable the "Quick Arm" feature, set Authority Level Option 2 to 0. A user PIN entry is not required for Perimeter Only arming.

Authority Level Option 3: Partial On Arming

- **Address:** 0366
- **Default:** 15
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 3: Partial On Arming	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required (Quick Arm)	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- [#][3]: Partial On Arming with Entry Delay
- [#][3]: Partial On Arming with Entry Delay, No Exit Tone*
- [#][3]: Partial On Arming with No Entry Delay

If a PIN is required and not entered, the system asks for one after the function is entered.

* Exit Time is doubled (up to 254 sec) when Partial On Arming the system with Entry Delay, Silent (no Exit Tone).

To enable the "Quick Arm" feature, set Authority Level Option 3 to 0. A user PIN entry is not required for Partial On arming.

Authority Level Option 4: Disarming the System

- **Address:** 0367
- **Default:** 15
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 4: Disarming the System	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Disarm Not Assigned (see warning below)	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts disarming of the system by authority level.

If 0 (Disarm Not Assigned) is selected for Authority Level Option 4 (Address 0367), you cannot disarm the system from a keypad or RF keyfob. You can still disarm from a Sked, RPS, or a keyswitch.

Authority Level Option 5: One-Time Disarm

- **Address:** 0368
- **Default:** 8
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 5: One-Time Disarm	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
One-Time Disarm Not Assigned	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

If an authority level can disarm the system, use this parameter to restrict that authority level to One-time Disarm (can only disarm the system once).

Authority Level Option 6: Send Open/Close Reports

- **Address:** 0369
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 6: Send Open/Close Reports	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Send Open/Close Reports for Authority Levels 1-4	•															
Authority Level 1 does not send Open/Close Reports		•		•		•		•		•		•		•		•
Authority Level 2 does not send Open/Close Reports			•	•			•	•			•	•			•	•
Authority Level 3 does not send Open/Close Reports					•	•	•	•					•	•	•	•
Authority Level 4 does not send Open/Close Reports									•	•	•	•	•	•	•	•

No Open/Close reports are sent for the authority level(s) selected at this parameter.

For example, if Open/Close reports are enabled for an area and Open/Close reports are disabled for Authority Level 1 in this parameter, the control panel sends Open/Close reports for users assigned to Authority Levels 2, 3 and 4. It does not send Open/Close reports for users assigned to Authority Level 1, even though Open/Close reports are enabled for the area.

See the following parameters to properly enable/disable Open/Close Reporting:

- *Routing Destinations* on page 9
- *Global Reporting Options* on page 19
- *Open/Close Reporting Options* on page 39
- *Area # Opening {89-96}/Closing {42-67} Reporting Options* on page 49

If you quick arm the system, this option is ignored and closing reports are sent with user ID 255. Opening reports are not sent.

Authority Level Option 7: Force Arm/Bypass

- **Address:** 0370
- **Default:** 7
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 7: Force Arm/Bypass	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- Force Arm
- [#][0]: Selective Bypass
- [Bypass] Key

Zones must be configured for Bypass/Force Arm operation. See *Options 2, Zone Function* ## on page 99.

Authority Level Option 8: All Areas On/Off

- **Address:** 0371
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 8: All Areas On/Off	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- [#][8][0]: All On with Delay, All Areas
- [#][8][1]: Off, All Areas

Both of these functions must be enabled at the system level first. See *Arming Options 2* on page 38.

For [#][8][0] to work as described, the authority level assigned to Authority Level Option 8 must match the authority level assigned to Authority Level Option 1 (All On Arming).

For [#][8][1] to work as described, the authority level assigned to Authority Level Option 8 must match the authority level assigned to Authority Level Option 4 (Disarming the System).

Authority Level Option 9: System Functions 1

- **Address:** 0372
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 9: System Functions 1	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- View Alarm Memory ([#][4][0])
- System Test ([#][4][1])
- View System Trouble ([#][4][2])
- Remote Program ([#][4][3])[1]
- Walk Test ([#][4][4])
- Reset Sensors ([#][4][7]) [System Reset][2]
- View Zone Trouble ([#][4][8])

[1] To enable the Remote Program function, see *Remote Programming Options* on page 35.

[2] Enable this parameter for Reset Sensor [#][4][7] for each user that can reset tamper and major trouble conditions (see *Tamper Reset/Arming Options* on page 44).

Authority Level Option 10: System Functions 2

- **Address:** 0373
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 10: System Functions 2	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- Set Time and Date (send Date/Time Change {73} report) ([#][4][5])
- Change Skeds ([#][5][2]) (see *Sked Parameters* on page 120 for more information)
- Renew One-Time PINs ([#][5][3])
- Change (Add) Other PINs ([#][5][6])
- Delete PINs ([#][5][8])
- Set Chime Tone ([#][6][2])
- Set Chime Zones ([#][6][3])
- Set Partial On Zones ([#][6][5])
- Auto-Call Forwarding Enable, Digits to dial at All On ([#][8][3])
- Auto-Call Forwarding Disable, Digits to dial at disarm ([#][8][4])
- Reset tampers/troubles ([#][4][7]) [Also requires authority level option 9)[1]
- Enable Installer PIN ([#][9][2])[2]

[1] Enable this parameter for each user that can reset tamper and major trouble conditions (see *Tamper Reset/Arming Options* on page 44).

[2] Set this parameter for each user who can enable the Installer PIN. For more information, see the "Restrict Installer PIN" option in *Keypad Response Options* on page 70.

Authority Level Option 11: Move to Area

- **Address:** 0374
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 11: Move to Area	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts Move to Area function ([#][5][0]) by authority level.

The Move to Area function allows the user to control multiple areas from one keypad when the system is split into more than one area. See the *DS7200V2 User's Guide* (P/N: 4998153894) for more information.

Authority Level Option 12: Extend Auto-On Time

- **Address:** 0375
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 12: Extend Auto-On Time	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the Extend Auto On Time function ([#][5][1]) by authority level.

The Extend Auto-On Time function delays the auto-on time by one hour if entered during the Auto-On Alert Time. See the *DS7200V2 User's Guide* (P/N: 4998153894) and *Auto On Alert Time* on page 26 for more information.

Authority Level Option 13: System Functions 3

- **Address:** 0376
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 13: System Functions 3	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the following functions by authority level:

- Adjust keypad sounder volume and lighting ([#][4][9])
- Change or reset outputs ([#][5][4])
- Chime toggle Off/On ([#][6][1])
- Auto-Forward – Enable/Disable ([#][8][2])

Authority Level Option 14: Change PIN

- **Address:** 0377
- **Default:** 1
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 14: Change PIN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Change Own PIN Not Allowed	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the PIN Change function ([#][5][5]) by authority level. The [#][5][5] function cannot change the Installer PIN.

If 0 (zero) is selected, then no user can change their own PIN.

Authority Level Option 15: View Log

- **Address:** 0378
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Authority Level Option 15: View Log	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No PIN Required	•															
Assign to Authority Level 1		•		•		•		•		•		•		•		•
Assign to Authority Level 2			•	•			•	•			•	•			•	•
Assign to Authority Level 3					•	•	•	•					•	•	•	•
Assign to Authority Level 4									•	•	•	•	•	•	•	•

This parameter enables/restricts the View Log function ([#][8][5]) by authority level.

4.4.2 PIN Configuration/Installer PIN

A **P**ersonal **I**dentification **N**umber (PIN) is a unique number issued at the time of installation of each system. This PIN is required to operate the system (arm/disarm, test system, initiate functions, etc.). The PIN is not the same as the account number.

PIN Length

- **Address:** 0379
- **Default:** 4 (4 digits long)
- **Selections:** 3 to 7 (3 digits min; 7 digits max)

This parameter determines the number of digits in a PIN. All user PINs and the Installer PIN follow this length.

If the PIN length is shortened after PINs are entered, duplicate PINs could be created (for example, PINs 1235 and 1238 would both become 123).

User Tamper Options

- **Address:** 0380
- **Default:** 0
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
User Tamper Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No User Tamper Options	•															
User Tamper {156} Reports Enabled		•		•												
User Tamper Activates Burg Alarm Output			•	•												
Reserved																
Reserved																

A user tamper event is:

- A user entering a PIN that is not in the system (the user must enter the invalid PIN the number of times shown in *User Tamper* Retry Count on page 62).
- A user entering a PIN that is in the system but does not have the authority for the desired function.

- **User Tamper Reports Enabled:** If enabled, this option ties User Tamper {156} reports and user tamper activated alarm outputs to the keypad's area. If only this option is selected and there is a user tamper event, the text keypad in the area where the event occurs shows "Keypad locked!"
- **User Tamper Activates Burg Alarm Output:** If the burglary alarm output (steady alarm output) is selected and there is a user tamper event, the text keypad where the user tamper occurred shows "Keypad locked!" Other text keypads in the area show "Usr Tamper Alarm, Enter PIN to silence." During the time the keypad is locked out, any key pressed produces an error tone (for text and LED keypads). Selecting this option specifically activates output functions 1|8, 1|9, 1|10, and 8|8. Output functions 1|8 and 1|9 only activate when the control panel is armed. See *Table 25* on page 112, for descriptions of these output functions.

User Tamper Retry Count

- **Address:** 0381
- **Default:** 4 (4 attempts)
- **Selections:**
  - 0 = User Retry Count Disabled
  - 1-15 = Number of attempts allowed before a User Tamper event occurs

Enter zero (0) to disable this parameter. The control panel creates a User Tamper event when a user enters an invalid PIN the number of times programmed in this parameter.

For example, "5" is entered in this parameter. When an invalid PIN is entered five times, a User Tamper event occurs.

User Tamper Lockout Time

- **Address:** 0382
- **Default:** 1 (1 minute)
- **Selections:** 0 to 15 (min.)

This parameter determines how long a keypad is locked out when a User Tamper event occurs (selections are in minutes).

Installer PIN

- **Address:** 0383 to 0389
- **Default:** 9876543
- **Selections:** 0 to 9

Do not use digits 10-15 when creating the Installer PIN or User PIN. Entering these digits makes the PIN unusable and locks the installer out of the control panel.

The Installer PIN length is the same as all other system PINs (see *PIN Length* on page 61).

The default PIN length is 4 digits, which makes the Installer PIN 4 digits in length. For example, if the Installer PIN is 7654321 and the PIN length is set to 4 digits, the Installer PIN changes to 7654.

The Installer PIN cannot disarm the system, but it can access all other functions.

The Installer PIN reports as User 0.

If the Installer PIN is left at its factory default, the control panel generates a System Trouble event if enabled in the *Date Format and Enable PIN Trouble* parameter (see page 33). Make sure to change the default value. This event is Local Only and is stored in the history buffer.

The Enable PIN Trouble option is disabled by default.

4.4.3 Users

The control panel reserves the following User IDs for automated functions: 251 (control panel generated); 252 (Sked operation); 253 (remote telephone communication); 254 (RPS communication); 255 (keyswitch operation or any local operation that does not require a PIN entry, such as Quick Arming).

See *Table 10* for User parameter addresses and defaults. Defaults for User 1 are shown in (**bold**). Users 2-32 are disabled by default.

Table 10: User Configuration

	Personal Identification Number (PIN) Addresses							Authority Level	Area
User	Digit 1	Digit 2	Digit 3	Digit 4	Digit 5	Digit 6	Digit 7	Selection	Selection
1	Addr 0390 **(1)**	Addr 0391 **(2)**	Addr 0392 **(3)**	Addr 0393 **(4)**	Addr 0394 **(5)**	Addr 0395 **(6)**	Addr 0396 **(7)**	Addr 0397 **(1)**	Addr 0398 **(15)**
2	Addr 0399	Addr 0400	Addr 0401	Addr 0402	Addr 0403	Addr 0404	Addr 0405	Addr 0406	Addr 0407
3	Addr 0408	Addr 0409	Addr 0410	Addr 0411	Addr 0412	Addr 0413	Addr 0414	Addr 0415	Addr 0416
4	Addr 0417	Addr 0418	Addr 0419	Addr 0420	Addr 0421	Addr 0422	Addr 0423	Addr 0424	Addr 0425
5	Addr 0426	Addr 0427	Addr 0428	Addr 0429	Addr 0430	Addr 0431	Addr 0432	Addr 0433	Addr 0434
6	Addr 0435	Addr 0436	Addr 0437	Addr 0438	Addr 0439	Addr 0440	Addr 0441	Addr 0442	Addr 0443
7	Addr 0444	Addr 0445	Addr 0446	Addr 0447	Addr 0448	Addr 0449	Addr 0450	Addr 0451	Addr 0452
8	Addr 0453	Addr 0454	Addr 0455	Addr 0456	Addr 0457	Addr 0458	Addr 0459	Addr 0460	Addr 0461
9	Addr 0462	Addr 0463	Addr 0464	Addr 0465	Addr 0466	Addr 0467	Addr 0468	Addr 0469	Addr 0470
10	Addr 0471	Addr 0472	Addr 0473	Addr 0474	Addr 0475	Addr 0476	Addr 0477	Addr 0478	Addr 0479
11	Addr 0480	Addr 0481	Addr 0482	Addr 0483	Addr 0484	Addr 0485	Addr 0486	Addr 0487	Addr 0488
12	Addr 0489	Addr 0490	Addr 0491	Addr 0492	Addr 0493	Addr 0494	Addr 0495	Addr 0496	Addr 0497
13	Addr 0498	Addr 0499	Addr 0500	Addr 0501	Addr 0502	Addr 0503	Addr 0504	Addr 0505	Addr 0506
14	Addr 0507	Addr 0508	Addr 0509	Addr 0510	Addr 0511	Addr 0512	Addr 0513	Addr 0514	Addr 0515
15	Addr 0516	Addr 0517	Addr 0518	Addr 0519	Addr 0520	Addr 0521	Addr 0522	Addr 0523	Addr 0524
16	Addr 0525	Addr 0526	Addr 0527	Addr 0528	Addr 0529	Addr 0530	Addr 0531	Addr 0532	Addr 0533
17	Addr 0534	Addr 0535	Addr 0536	Addr 0537	Addr 0538	Addr 0539	Addr 0540	Addr 0541	Addr 0542
18	Addr 0543	Addr 0544	Addr 0545	Addr 0546	Addr 0547	Addr 0548	Addr 0549	Addr 0550	Addr 0551
19	Addr 0552	Addr 0553	Addr 0554	Addr 0555	Addr 0556	Addr 0557	Addr 0558	Addr 0559	Addr 0560
20	Addr 0561	Addr 0562	Addr 0563	Addr 0564	Addr 0565	Addr 0566	Addr 0567	Addr 0568	Addr 0569
21	Addr 0570	Addr 0571	Addr 0572	Addr 0573	Addr 0574	Addr 0575	Addr 0576	Addr 0577	Addr 0578
22	Addr 0579	Addr 0580	Addr 0581	Addr 0582	Addr 0583	Addr 0584	Addr 0585	Addr 0586	Addr 0587
23	Addr 0588	Addr 0589	Addr 0590	Addr 0591	Addr 0592	Addr 0593	Addr 0594	Addr 0595	Addr 0596
24	Addr 0597	Addr 0598	Addr 0599	Addr 0600	Addr 0601	Addr 0602	Addr 0603	Addr 0604	Addr 0605
25	Addr 0606	Addr 0607	Addr 0608	Addr 0609	Addr 0610	Addr 0611	Addr 0612	Addr 0613	Addr 0614
26	Addr 0615	Addr 0616	Addr 0617	Addr 0618	Addr 0619	Addr 0620	Addr 0621	Addr 0622	Addr 0623
27	Addr 0624	Addr 0625	Addr 0626	Addr 0627	Addr 0628	Addr 0629	Addr 0630	Addr 0631	Addr 0632
28	Addr 0633	Addr 0634	Addr 0635	Addr 0636	Addr 0637	Addr 0638	Addr 0639	Addr 0640	Addr 0641
29	Addr 0642	Addr 0643	Addr 0644	Addr 0645	Addr 0646	Addr 0647	Addr 0648	Addr 0649	Addr 0650
30	Addr 0651	Addr 0652	Addr 0653	Addr 0654	Addr 0655	Addr 0656	Addr 0657	Addr 0658	Addr 0659
31	Addr 0660	Addr 0661	Addr 0662	Addr 0663	Addr 0664	Addr 0665	Addr 0666	Addr 0667	Addr 0668
32	Addr 0669	Addr 0670	Addr 0671	Addr 0672	Addr 0673	Addr 0674	Addr 0675	Addr 0676	Addr 0677

User 28 can be configured as the Guard Code User. See *Guard Code Options* on page 74 for more information.

Users 29 to 32 can be configured as Duress Users. See *Duress Reporting Options* on page 73.

PIN, User #

- **Address:** See *Table 10* on page 64
- **Default:**
  - **User 1:** 1, 2, 3, 4, 5, 6, 7
  - **Users 2-32:** 15, 15, 15, 15, 15, 15, 15
- **Selections:** 0 to 9

Enter a PIN for each user in the PIN parameter. The PIN length parameter determines the number of digits in the PINs.

The default PIN length is 4 digits, which makes all User PINs four digits in length. For example, if a User PIN is 7654321 and the PIN length is set to 4 digits, the User PIN changes to 7654.

Do not use digits 10 to 15 when creating a User PIN. Entering these digits makes the PIN unusable and locks the user out of the control panel.

Authority Level, User #

- **Address:** See *Table 10* on page 64
- **Default:**
  - **User 1:** 1 (Authority Level 1)
  - **Users 2-32:** 0 (No Authority Level assigned)
- **Selections:**
  - 0 = No Authority Level assigned (Disabled)
  - 1 = Authority Level 1 assigned
  - 2 = Authority Level 2 assigned
  - 3 = Authority Level 3 assigned
  - 4 = Authority Level 4 assigned

This parameter assigns an authority level to each user. The authority level assigns functions to the user's PIN and RF keyfob. See *RF Keyfobs* on page 78 for a description of RF keyfobs and how to assign them to users.

Authority levels are configured as shown below. See *Authority Level Configuration* on page 52 to change the configuration of authority levels.

- **Authority Level 1 (Master):** All options except for Option 5. A user with this authority level configuration can arm and disarm the system, send reports, and perform all system functions except one-time disarm.
- **Authority Level 2 (Unlimited):** All options except for Option 5 and 14. A user with this authority level configuration can arm and disarm the system, send reports, and perform all system functions except one-time disarm and change PINs.
- **Authority Level 3 (User):** All options except for Options 5 and 8 to 15. A user with this authority level configuration can arm and disarm the system, send reports, but can only perform a limited number of system functions.
- **Authority Level 4 (One-Time):** All options except 7 to 15. A user with this authority level configuration can arm and disarm the system (one-time only), send reports, but can only perform a limited number of system functions and cannot force-arm or bypass zones when arming the system.

Area Option, User #

- **Address:** See *Table 10* on page 64
- **Default:**
  - **User 1:**
    - **DS7240V2:** 15 (Areas 1 to 4)
    - **DS7220V2:** 3 (Areas 1 and 2)
  - **Users 2 to 32:** 0 (Not assigned to an area)
- **Selections:** 0-15

	Enter This Data Digit to Select Options															
User Area Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Not Assigned to an Area	•															
Assigned to Area 1		•		•		•		•		•		•		•		•
Assigned to Area 2			•	•			•	•			•	•			•	•
Assigned to Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Assigned to Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

Assigning PINs to multiple areas allows users to view and operate multiple areas from a single keypad.

4.4.4 Keypads

Wired Keypads 1 to 8 are fixed at Data Bus Addresses 1 to 8. See "Keypad Addressing" in the *DS7200V2 Installer's Guide* (P/N: 4998153893). All keypads (and other Data Bus devices) are fully supervised. Supervision reports, such as missing and tamper, follow the System Status Report routing.

Keypad # Options

- **Address:**
  - **Keypad 1:** 0678
  - **Keypad 2:** 0680
  - **Keypad 3:** 0682
  - **Keypad 4:** 0684
  - **Keypad 5:** 0686
  - **Keypad 6:** 0688
  - **Keypad 7:** 0690
  - **Keypad 8:** 0692
- **Default:** 7
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Keypad Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Keypad Options	•															
Beep Keypad on System Trouble		•		•		•		•		•		•		•		•
Enable Exit Tone			•	•			•	•			•	•			•	•
Enable Area Display (DS7446KP Keypad)					•	•	•	•					•	•	•	•
Don't Show Zone Status on Keypads									•	•	•	•	•	•	•	•

- **Beep Keypad on System Trouble:** If enabled, this option sounds a tone at the keypad when a System Trouble occurs.
- **Enable Exit Tone:** If enabled, this option sounds the Exit Delay tone at this keypad when Exit Delay is active.
- **Enable Area Display (DS7446KP Keypad):** If this option is enabled, the DS7446KP Keypad shows the current state of each area using its four Area icons.

Table 11: DS7446KP Keypad Icon Functions

Function	Condition
Icon flashes fast	Area is in alarm
Icon is On Steady	Area is in armed, but not in alarm
Icon flashes slow	Trouble condition exists, or zone is bypassed in area
Icon is Off	Area is disarmed, no alarm/trouble conditions exist, no zones are bypassed

If the "Enable Area Display" option is disabled, the DS7446KP Keypad displays the area to which it is currently assigned if it is not in its home area. If the keypad moved to another area, the icon for the new area lights steady. For example, if the keypad moved ([#][5][0]) to Area 1, no area icons are lit. If it moved to Area 2, the Area 2 icon turns on.

- **Don't Show Zone Status on Keypads:** If the "Don't Show Zone Status on Keypads" option is not enabled in the *Keypad # Options* parameter, the text keypad displays "OK for All On" or "OK for Perimeter Only" across the second line. This indicates that all zones are normal and the system is ready to arm All On or Perimeter Only. If a controlled zone is faulted, the Area Idle Text for this zone's assigned area replaces the "OK for All On/OK for Perimeter Only" message.

  If a zone not configured for Perimeter Only arming is faulted, "OK for Perimeter Only" replaces "OK for All On" on the text keypad's display. The system might be armed Perimeter Only, but cannot be armed All On until the faulted zone is restored.

  If the "Don't Show Zone Status on Keypads" option is enabled, the area idle text displays continuously on line two when the keypad is idle.

  LED keypads do not show zone status if this option is selected.

If the "Don't Show Zone Status on Keypads" option is selected, the default Area Idle Text ("Not Ready") should be changed. See *Text Entry Addresses* on page 7 for text entry instructions.

Keypad/Door Access Control Module (DACM) Area Options

- **Address:**
  - **Keypad/DACM 1:** 0679
  - **Keypad/DACM 2:** 0681
  - **Keypad/DACM 3:** 0683
  - **Keypad/DACM 4:** 0685
  - **Keypad/DACM 5:** 0687
  - **Keypad/DACM 6:** 0689
  - **Keypad/DACM 7:** 0691
  - **Keypad/DACM 8:** 0693
- **Default:**
  - **Keypad/DACM 1:** 1 (Device is a keypad assigned to Area 1)
  - **Keypads/DACMs 2 to 8:** 0 (No keypad/DACM assigned)
- **Selections:** 0 to 4, 9 to 12

	Enter This Data Digit to Select Options															
Keypad/DACM Area Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Keypad/DACM not assigned (disabled)	•															
Assign Keypad/DACM to Area 1		•								•						
Assign Keypad/DACM to Area 2			•								•					
Assign Keypad/DACM to Area 3 (DS7240V2 only)				•								•				
Assign Keypad/DACM to Area 4 (DS7240V2 only)					•								•			
Device is a Keypad		•	•	•	•											
Device is a DACM										•	•	•	•			

Assign only one area to each keypad. Users (PINs) can be assigned to multiple areas. The Move to Area function ([#][5][0]) allows users (PINs) assigned to multiple areas to view those areas from one keypad.

The control panel supervises the connection to the DACM. If it fails to communicate with the control panel, the control panel sends a "Dbus Missing" {125} report.

See the documentation supplied with the DACM for complete installation, programming, addressing, and operation instructions.

The control panel supports up to 8 DACMs. However, each DACM added to the system replaces one keypad. If 8 DACMs are added, you cannot add a keypad. For full system control, make sure at least one text keypad is included in the system.

Keypad Response Options

- **Address:** 0704
- **Default:** 0
- **Selections:** 0 to 3, 6 to 11, 14, 15

	Enter This Data Digit to Select Options															
Keypad Response Options	**0**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No Keypad Response Options	•															
Enable Keypad Tamper Response		•		•				•		•		•				•
Enable Extinguish Mode			•	•			•	•			•	•			•	•
Extinguish Mode Displays Date							•	•							•	•
Restrict Installer PIN									•	•	•	•			•	•

This is a global parameter that affects all keypads.

- **Enable Keypad Tamper Response:** If this option is enabled, the control panel checks for a keypad tamper response from each keypad. If this option is disabled, the control panel ignores the keypad tamper response.

To use this option, enable it at the control panel by setting Address 0704 to "1," and enable the keypad's tamper jumper pins. See the installation instructions accompanying the keypad for information.

- **Enable Extinguish Mode:** If this option is enabled, the keypads extinguish when there is no activity. The Power LED is always on, but any other LEDs are blank. The text keypad display also goes blank. Entering a PIN turns the LEDs on and causes the text keypads to display text. If this option is disabled, the keypads are never extinguished.
- **Extinguish Mode Displays Date:** If this option is enabled, when the keypad's display is extinguished, the text keypad's display shows the date and time on the first line, and the Call for Service Text (see page 26) on the second line. If this option is disabled, the text keypad's display is blank.

You must select the "Enable Extinguish Mode" option in order to use the "Extinguish Mode Displays Date" option.

- **Restrict Installer PIN:** If this option is enabled, the Installer's PIN is restricted. The user must press [#][9][2] to enable the Installer PIN. Once the Installer PIN is enabled, the installer may enter his PIN and access the installer functions. If this option is disabled, the Installer's PIN is always operative, and the Installer PIN can clear Extinguish Mode.

4.4.5 ABC Keys and Duress Parameters

The following parameters configure the keypad's ABC keys and the Duress function for all keypads and areas. Each key has 16 characters of programmable text that is displayed when the key is activated (press twice to activate).

Area Options for ABC Keys

- **Address:**
  - **[A] Key:** 0694
  - **[B] Key:** 0696
  - **[C] Key:** 0698
- **Default:**
  - **DS7240V2:** 15 (Areas 1 to 4)
  - **DS7220V2:** 3 (Areas 1 and 2)
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
ABC Key Area Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Disabled for all Areas	•															
Keys work for Area 1		•		•		•		•		•		•		•		•
Keys work for Area 2			•	•			•	•			•	•			•	•
Keys work for Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Keys work for Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

This parameter assigns areas to the keypad ABC Keys.

Alarm Response for ABC Keys

- **Address:**
  - **Alarm Response for [A] Key:** 0695
  - **Alarm Response for [B] Key:** 0697
  - **Alarm Response for [C] Key:** 0699
- **Default:** 0 (No Alarm Response)
- **Selections:**
  - 0 = No Alarm Response
  - 1 = Activate Fire Alarm Response
  - 2 = Activate Panic Alarm Response
  - 3 = Activate Emergency Alarm Response

This parameter assigns the alarm response for the ABC keys.

- **Fire Alarm Response:** If enabled, this option displays "Fire Alarm Key #" at the text keypads. If programmed, the control panel sends a Fire Alarm {75} report and activates the Fire Alarm output.
- **Panic Alarm Response:** If enabled, this option displays nothing and no sounds are emitted at the keypads. If programmed, a Panic {6} report is sent and the Burglary Alarm output is activated.
- **Emergency Alarm Response:** If enabled, this option displays "Alarm Key #" at the text keypads. If programmed, an Emergency Alarm {4} report is sent and the Burglary Alarm output is activated.

Alarm Output Option for ABC Keys

- **Address:** 0700
- **Default:** 0
- **Selections:** 0 to 7

	Enter This Data Digit to Select Options															
Alarm Output Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alarm Output for ABC Keys	•															
Alarm Output for [A] Key		•		•		•		•								
Alarm Output for [B] Key			•	•			•	•								
Alarm Output for [C] Key					•	•	•	•								
Reserved																

This parameter assigns an alarm output option to the ABC keys. The alarm output activates for the response type assigned to each key. This is a global parameter that affects all areas.

ABC Key Reports/Ack Beep Options

- **Address:** 0701
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
ABC Keys Report & Ack Beep Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alarm Report for ABC Keys	•															
Enable ABC Keys Reporting		•		•		•		•		•		•		•		•
Acknowledgement Beep for [A] Key			•	•			•	•			•	•			•	•
Acknowledgement Beep for [B] Key					•	•	•	•					•	•	•	•
Acknowledgement Beep for [C] Key									•	•	•	•	•	•	•	•

This is a global parameter that affects all areas.

- **Enable ABC Keys Reporting:** If this option is enabled, the keys report as follows:
  - [A] Key reports as Zone 100
  - [B] Key reports as Zone 101
  - [C] Key reports as Zone 102
- **Acknowledgement Beep for ABC Keys:** If this option is enabled, the keypad beeps when the ARC receiver acknowledges a report. If the key is not programmed for reports, the beep occurs on activation.

Duress Reporting Options

- **Address:** 0702
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Duress Reporting Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No User Emergency Function Reporting	•															
Make User 32 a Duress User		•		•		•		•		•		•		•		•
Make User 31 a Duress User			•	•			•	•			•	•			•	•
Make User 30 a Duress User					•	•	•	•					•	•	•	•
Make User 29 a Duress User									•	•	•	•	•	•	•	•

This parameter creates up to 4 Duress users (and PINs). Creating a Duress user does not change any other function programmed for that user.

Whenever a user enters a Duress PIN (PIN assigned to a Duress user), the control panel sends a Duress {74} report and executes functions per the Duress user's authority level.

To create a unique Duress user (and PIN) for each area, select Option 15 and then assign each of the four users (User 29 through 32) to only one area.

To create one Duress user (and PIN) for all areas, select Option 1, 2, 4 or 8 and then assign that user (User 29 through 32) to all four areas.

ABC Keys and Duress Report Routing

- **Address:** 0703
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

The [A] Key reports as Zone 100 for all areas, the [B] Key reports as Zone 101 for all areas and the [C] Key reports as Zone 102 for all areas.

This is a global parameter that affects all areas. See "Communication Failure (Comm Fail)" for a description of the Comm Fail event and "Dialing Attempt Tables" for the dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

The RF Keyfob "Panic" option follows this routing.

Guard Code Options

- **Address:** 0705
- **Default:** 0 (No Guard Code Options)
- **Selections:**
  - 0 = No Guard Code Options
  - 1 = User 28 is a Guard Code

User 28 can be programmed as a Guard Code. The Guard Code only works in the areas to which User 28 is assigned. The authority level assigned to the Guard Code (User 28) dictates which keypad functions the guard can use.

For example, Authority Level Configuration Option 1 configures All On arming. If this is set to 0 (zero), the guard can arm at any time. If the guard's authority level does not allow All On arming, then the guard can never arm All On. If the guard's authority level allows All On arming, the guard can arm the area All On only if the Guard Code was used to disarm the area.

Authority Level Configuration Options 2 and 3 configure Perimeter Only Arming and Partial On arming. If these are set to 0 (zero), then the guard can arm in these modes at any time. If the guard's authority level does not allow these modes, then the guard can never arm using these modes. If the guard's authority level allows these modes, then the guard can arm the area using these modes only if the Guard Code was used to disarm the area.

Authority Level Configuration Option 4 configures system disarming. If this is set to 0 (zero), the guard can never disarm the system. If the guard's authority level does not allow disarming, the guard can never disarm the area. If the guard's authority level does allow disarming, then the Guard Code can only disarm the system if the system had a non-silenced alarm.

Authority Level Configuration Options 5-15 operate the same for the Guard Code as they do for any other user code. Enabling or disabling these options controls which functions the Guard Code can perform.

ABC Keys Text

- **Address:**
  - **[A]:** 1298 to 1329
  - **[B]:** 1330 to 1361
  - **[C]:** 1362 to 1393
- **Default:**
  - **[A]:** A Key Text
  - **[B]:** B Key Text
  - **[C]:** C Key Text
- **Selections:** See *Table 3* on page 7

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

Enter up to 16 characters to describe the ABC key sequences.

4.4.6 RF Keypads

The control panel supports up to four RF keypads. Each keypad has two programming parameters. RF keypads report conditions such as low battery and tamper by transmitter number.

You must exit control panel programming in order to enter RF ID codes. Add RF ID codes after you complete your programming session. See "Adding RF ID Codes" in *DS7200V2 Installer's Guide* (P/N: 4998153893) for complete instructions.

Table 12: RF Keypad Data Bus Addresses/Transmitter Numbers

RF Keypad	Receiver 1 Data Bus Address	Transmitter Number	Receiver 2 Data Bus Address	Transmitter Number
1	52	255	60	247
2	53	254	61	246
3	54	253	62	245
4	55	252	63	244

RF Keypad # Options

- **Address:**
  - **RF Keypad 1:** 2930
  - **RF Keypad 2:** 2932
  - **RF Keypad 3:** 2934
  - **RF Keypad 4:** 2936
- **Default:** 0
- **Selections:** 0, 2, 4, 6

	Enter This Data Digit to Select Options															
RF Keypad # Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Reserved																
Belongs to RF Receiver 2			•				•									
Supervised					•		•									
Reserved																

- **Belongs to RF Receiver 2:** If this option is enabled, RF Receiver 2 performs ID and monitoring functions for the keypad. If this option is disabled, the keypad belongs to Receiver 1.
- **Supervised:** If this option is enabled, the control panel generates missing reports if it does not receive communication from the RF keypad.

RF Keypad # Area

- **Address:**
  - **RF Keypad 1:** 2931
  - **RF Keypad 2:** 2933
  - **RF Keypad 3:** 2935
  - **RF Keypad 4:** 2937
- **Default:** 0 (Disabled)
- **Selections:**
  - 0 = Disabled (No Area Assigned)
  - 1 = Assign RF Keypad to Area 1
  - 2 = Assign RF Keypad to Area 2
  - 3 = Assign RF Keypad to Area 3 (DS7240V2 only)
  - 4 = Assign RF Keypad to Area 4 (DS7240V2 only)

To enable an RF keypad, assign it to an area. To disable an RF keypad, enter a 0 at this parameter.

4.4.7 Q Button Configuration

[Q] Button Alarm Response Options

- **Address:** 1263
- **Default:** 0
- **Selections:**
  - 0 = No Alarm Response
  - 1 = Panic Alarm Response
  - 2 = Emergency Alarm Response
  - 3 = Duress Alarm Response

This parameter assigns an alarm response to the [Q] button on the RF3501E 1-Button Pendant (or other device with a [Q] button). This is a global parameter and affects the programming of all key fobs with [Q] buttons in all areas.

- **No Alarm Response:** No alarm outputs are activated and no reports are sent. The [Q] button can be used to control an output.
- **Panic Alarm Response:** If Alarm Output is enabled, the control panel sends a Panic {5} report and sounds the alarm outputs. If Alarm Output is disabled, the control panel only sends an Invisible Panic {6} report. No keypad tones or displays are generated. This option activates output function type 8|15.
- **Emergency Alarm Response:** This option displays "User Alarm" at the text keypads. The [Q] button sends an Emergency Alarm {4} report, and the Burglary Alarm outputs are activated (optional). This option activates output function type 8|15.
- **Duress Alarm Response:** This option sends a Duress {74} report. If configured, the text keypads display "User Alarm" and the alarm outputs activate. This option makes the [Q] button function the same as Panic on the keyfob. This option activates output function types 2|1, 2|2, and 8|15.

[Q] Button Configuration Options

- **Address:** 1264
- **Default:** 0
- **Selections:** 0 to 1, 3 to 5, 7 to 9, 11 to 13, 15

	Enter This Data Digit to Select Options															
[Q] Button Configuration Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Enable [Q] Button Reporting		•		•		•		•		•		•		•		•
Enable [Q] Button Voice Verification				•				•				•				•
Enable [Q] Button Alarm Output					•	•		•					•	•		•
Enable [Q] Button Ack Beep									•	•		•	•	•		•

This parameter configures the [Q] button on the RF3501E 1-Button Pendant (or other device with a [Q] button. This is a global parameter and affects the programming of all key fobs with [Q] buttons in all areas.

- **Enable [Q] Button Reporting:** If enabled, this option sends a report to the control panel using the *ABC Keys and Duress Report Routing* (see page 73). If this option is disabled, the report is logged into the control panel's history only if the report routing specifies events to the log/printer. If Address 1263 is set to "No Alarm Response," then no report is sent and no event is placed in the control panel's history log.
- **Enable [Q] Button Voice Verification:** If enabled, this option activates the Voice Verification response only is a report is actually sent. When the report is acknowledged, the voice verification session begins.
- **Enable [Q] Button Alarm Output:** If enabled, this option activates alarm output types 1|5, 1|6, 1|8, 1|9, 1|10, and 8|8.
- **Enable [Q] Button Ack Beep:** If enabled, this option beeps the area keypads after a report is sent. All keypads in the area beep when the control panel receives the acknowledgement (ack) that the report was received. The area keypads beep as soon as the [Q] button is pressed if any of the following conditions are true:
  - [Q] button alarm response is set to "No Alarm Response" (see Address 1263)
  - [Q] button reporting is disabled
  - [Q] button report routing does not send a report

4.4.8 RF Keyfobs

RF keyfobs (two- and four-button keychain keypads) are managed internally by the control panel. Keyfobs are assigned to PINs (users) by entering IDs. No other programming parameters are required. Keyfobs generally follow the authority level and area assignment for the PIN they are assigned to.

RF keyfobs report low battery conditions using the user number (1 to 32). The user's ID number, not the transmitter number, is used for open/close reports. Each receiver can handle 24 keyfobs. For 32 keyfobs, two RF Receivers are required. Address 2938 must be set to a value from 1 to 14.

To add an RF keyfob into the system, see "Adding RF ID Codes" in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

RF Keyfob Receiver Assignment Options

- **Address:** 2938
- **Default:** 8
- **Selections:** 1 to 14

	Enter This Data Digit to Select Options															
RF Keyfob Receiver Assignment Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected (all RF on RF Receiver 1)																
Assign Keyfobs 1-8 to RF Receiver 2		•		•		•		•		•		•		•		
Assign Keyfobs 9-16 to RF Receiver 2			•	•			•	•			•	•			•	
Assign Keyfobs 17-24 to RF Receiver 2					•	•	•	•					•	•	•	
Assign Keyfobs 25-32 to RF Receiver 2									•	•	•	•	•	•	•	

This parameter assigns keyfobs in groups of eight to RF Receiver 2. Keyfobs not assigned to RF Receiver 2 are automatically assigned to RF Receiver 1.

RF Keyfob Options

- **Address:** 2939
- **Default:** 0
- **Selections:** 0, 1, 3 to 5, 7 to 9, 11 to 13, 15

	Enter This Data Digit to Select Options															
RF Keyfob Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Panic Enabled		•		•		•		•		•		•		•		•
Alarm Output on Panic				•				•				•				•
Assign [O] (trapezoid) key to Perimeter Only On					•	•		•					•	•		•
Assign [P] key to Partial On									•	•		•	•	•		•

This parameter configures all keyfobs for all areas and all PINs.

- **Panic Enabled:** This option configures the system's response to the RF panic signal. Pressing the **Lock** and **Unlock** keys on the keyfob simultaneously transmits a unique Panic signal to the RF Receiver. If the keyfob Panic option is enabled, the system sends a Duress report. Duress reports from keyfobs follow ABC Keys/Duress Report Routing (see *ABC Keys and Duress Report Routing* on page 73 and *Duress Reporting Options* on page 73).
- **Alarm Output on Panic:** If this option is enabled, the keyfob activates the alarm output when the **Lock** and **Unlock** keys are simultaneously pressed. The "Panic Enabled" option must enabled.
- **Assign [O] (Trapezoid) Key to Perimeter Only:** If this option is enabled, the keyfob arms the system Perimeter Only when [O] is pressed. If you select this option, you cannot use [O] to activate Output Function 1|15.
- **Assign [P] (Sun) Key to Partial On:** If this option is enabled, the keyfob arms the system Partial On when [P] is pressed. The [P] key on the RF keypads is also configured by this option. If you select this option, you cannot use [P] to activate Output Function 2|0.

4.5 Zone Parameters

4.5.1 Location Configuration

The DS7240V2 supports Locations 1 to 40. The DS7220V2 supports Locations 1 to 24. Locations become zones by configuring the following parameters: Device, Zone Function, Area, and Zone Number. All four of these parameters must be configured for each location being used in the system. See *Table 13* for location parameter addresses and defaults (**defaults are shown in bold**).

Table 13: Location Configuration Parameters

	Location Parameters These columns show the addresses and defaults for each of the four location parameters. These parameters configure each location.				**Device Parameter Selections** These columns show the selections for the "Device" parameter. The Device parameter tells the control panel where to find the sensor loop (or transmitter) status for each Location.					
Location	**Device**	**Zone Function**	**Area**	**Zone #**	**On-board Device = 1**	**DX2010[1] Device = 2**	**DX2010[1] Doubled Device = 3**	**RF Rcvr 1 [1,2] Device = 4**	**RF Rcvr 2 [1,2] Device = 5**	**DACM[3] Device = 6 (optional)**
1	0706 **(1)**	0707 **(11)**	0708 **(1)**	0709, 0710 **(0,1)**	3.65 k Ω when doubled w/9	DBus Adr 101 Loop 1		DBus Adr 50 Xmitter 1	DBus Adr 51 Xmitter 1	DACM
2	0711 **(1)**	0712 **(11)**	0713 **(1)**	0714, 0715 **(0,2)**	3.65 k Ω when doubled w/10	DBus Adr 101 Loop 2		DBus Adr 50 Xmitter 2	DBus Adr 51 Xmitter 2	DACM
3	0716 **(1)**	0717 **(12)**	0718 **(1)**	0719, 0720 **(0,3)**	3.65 k Ω when doubled w/ 11	DBus Adr 101 Loop 3		DBus Adr 50 Xmitter 3	DBus Adr 51 Xmitter 3	DACM
4	0721 **(1)**	0722 **(13)**	0723 **(1)**	0724, 0725 **(0,4)**	3.65 k Ω when doubled w/ 12	DBus Adr 101 Loop 4		DBus Adr 50 Xmitter 4	DBus Adr 51 Xmitter 4	DACM
5	0726 **(1)**	0727 **(13)**	0728 **(1)**	0729, 0730 **(0,5)**	3.65 k Ω when doubled w/ 13	DBus Adr 101 Loop 5		DBus Adr 50 Xmitter 5	DBus Adr 51 Xmitter 5	DACM
6	0731 **(1)**	0732 **(14)**	0733 **(1)**	0734, 0735 **(0,6)**	3.65 k Ω when doubled w/ 14	DBus Adr 101 Loop 6		DBus Adr 50 Xmitter 6	DBus Adr 51 Xmitter 6	DACM
7	0736 **(1)**	0737 **(14)**	0738 **(1)**	0739, 0740 **(0,7)**	3.65 k Ω when doubled w/ 15	DBus Adr 101 Loop 7		DBus Adr 50 Xmitter 7	DBus Adr 51 Xmitter 7	DACM
8	0741 **(1)**	0742 **(4)**	0743 **(1)**	0744, 0745 **(0,8)**	3.65 k Ω when doubled w/ 16	DBus Adr 101 Loop 8		DBus Adr 50 Xmitter 8	DBus Adr 51 Xmitter 8	DACM
9	0746 **(0)**	0747 **(0)**	0748 **(1)**	0749, 0750 **(0,9)**	Doubled w/ 1 2.2 k Ω	DBus Adr 102 Loop 1	DBus Adr 106 Loop 1; 3.65 kΩ	DBus Adr 50 Xmitter 9	DBus Adr 51 Xmitter 9	DACM
10	0751 **(0)**	0752 **(0)**	0753 **(1)**	0754, 0755 **(1,0)**	Doubled w/ 2 2.2 k Ω	DBus Adr 102 Loop 2	DBus Adr 106 Loop 2; 3.65 kΩ	DBus Adr 50 Xmitter 10	DBus Adr 51 Xmitter 10	DACM
11	0756 **(0)**	0757 **(0)**	0758 **(1)**	0759, 0760 **(1,1)**	Doubled w/ 3 2.2 k Ω	DBus Adr 102 Loop 3	DBus Adr 106 Loop 3; 3.65 kΩ	DBus Adr 50 Xmitter 11	DBus Adr 51 Xmitter 11	DACM
12	0761 **(0)**	0762 **(0)**	0763 **(1)**	0764, 0765 **(1,2)**	Doubled w/ 4 2.2 k Ω	DBus Adr 102 Loop 4	DBus Adr 106 Loop 4; 3.65 kΩ	DBus Adr 50 Xmitter 12	DBus Adr 51 Xmitter 12	DACM
13	0766 **(0)**	0767 **(0)**	0768 **(1)**	0769, 0770 **(1,3)**	Doubled w/ 5 2.2 k Ω	DBus Adr 102 Loop 5	DBus Adr 106 Loop 5; 3.65 kΩ	DBus Adr 50 Xmitter 13	DBus Adr 51 Xmitter 13	DACM
14	0771 **(0)**	0772 **(0)**	0773 **(1)**	0774, 0775 **(1,4)**	Doubled w/ 6 2.2 k Ω	DBus Adr 102 Loop 6	DBus Adr 106 Loop 6; 3.65 kΩ	DBus Adr 50 Xmitter 14	DBus Adr 51 Xmitter 14	DACM
15	0776 **(0)**	0777 **(0)**	0778 **(1)**	0779, 0780 **(1,5)**	Doubled w/ 7 2.2 k Ω	DBus Adr 102 Loop 7	DBus Adr 106 Loop 7; 3.65 kΩ	DBus Adr 50 Xmitter 15	DBus Adr 51 Xmitter 15	DACM
16	0781 **(0)**	0782 **(0)**	0783 **(1)**	0784, 0785 **(1,6)**	Doubled w/ 8 2.2 k Ω	DBus Adr 102 Loop 8	DBus Adr 106 Loop 8; 3.65 kΩ	DBus Adr 50 Xmitter 16	DBus Adr 51 Xmitter 16	DACM
17	0786 **(0)**	0787 **(0)**	0788 **(1)**	0789, 0790 **(1,7)**		DBus Adr 103 Loop 1	DBus Adr 106 Loop 1; 2.2 kΩ	DBus Adr 50 Xmitter 17	DBus Adr 51 Xmitter 17	DACM
18	0791 **(0)**	0792 **(0)**	0793 **(1)**	0794, 0795 **(1,8)**		DBus Adr 103 Loop 2	DBus Adr 106 Loop 2; 2.2 kΩ	DBus Adr 50 Xmitter 18	DBus Adr 51 Xmitter 18	DACM
19	0796 **(0)**	0797 **(0)**	0798 **(1)**	0799, 0800 **(1,9)**		DBus Adr 103 Loop 3	DBus Adr 106 Loop 3; 2.2 kΩ	DBus Adr 50 Xmitter 19	DBus Adr 51 Xmitter 19	DACM
20	0801 **(0)**	0802 **(0)**	0803 **(1)**	0804, 0805 **(2,0)**		DBus Adr 103 Loop 4	DBus Adr 106 Loop 4; 2.2 kΩ	DBus Adr 50 Xmitter 20	DBus Adr 51 Xmitter 20	DACM

[1] DBus = Data Bus

[2] Xmitter = Transmitter

[3] DACM = DACM door contact. Integrating the DACM door contact into the security system is optional. See *DACM Configuration* on page 135 for instructions on integrating the DACM door contact into the security system.

Table 13: Location Configuration Parameters (continued)

	Location Parameters These columns show the addresses and defaults for each of the four location parameters. These parameters configure each location. Shaded cells only apply to the DS7240V2.				**Device Parameter Selections** These columns show the selections for the "Device" parameter. The Device parameter tells the control panel where to find the sensor loop (or transmitter) status for each Location.					
Location	**Device**	**Zone Function**	**Area**	**Zone #**	**On-board Device = 1**	**DX2010[1] Device = 2**	**DX2010[1] Doubled Device = 3**	**RF Rcvr 1 [1,2] Device = 4**	**RF Rcvr 2 [1,2] Device = 5**	**DACM[3] Device = 6 (optional)**
21	0806 **(0)**	0807 **(0)**	0808 **(1)**	0809, 0810 **(2,1)**		DBus Adr 103 Loop 5	DBus Adr 106 Loop 5; 2.2 kΩ	DBus Adr 50 Xmitter 21	DBus Adr 51 Xmitter 21	DACM
22	0811 **(0)**	0812 **(0)**	0813 **(1)**	0814, 0815 **(2,2)**		DBus Adr 103 Loop 6	DBus Adr 106 Loop 6; 2.2 kΩ	DBus Adr 50 Xmitter 22	DBus Adr 51 Xmitter 22	DACM
23	0816 **(0)**	0817 **(0)**	0818 **(1)**	0819, 0820 **(2,3)**		DBus Adr 103 Loop 7	DBus Adr 106 Loop 7; 2.2 kΩ	DBus Adr 50 Xmitter 23	DBus Adr 51 Xmitter 23	DACM
24	0821 **(0)**	0822 **(0)**	0823 **(1)**	0824, 0825 **(2,4)**		DBus Adr 103 Loop 8	DBus Adr 106 Loop 8; 2.2 kΩ	DBus Adr 50 Xmitter 24	DBus Adr 51 Xmitter 24	DACM
25	0826 **(0)**	0827 **(0)**	0828 **(1)**	0829, 0830 **(2,5)**		DBus Adr 104 Loop 1	DBus Adr 107 Loop 1; 3.65 kΩ	DBus Adr 50 Xmitter 25	DBus Adr 51 Xmitter 25	DACM
26	0831 **(0)**	0832 **(0)**	0833 **(1)**	0834, 0835 **(2,6)**		DBus Adr 104 Loop 2	DBus Adr 107 Loop 2; 3.65 kΩ	DBus Adr 50 Xmitter 26	DBus Adr 51 Xmitter 26	DACM
27	0836 **(0)**	0837 **(0)**	0838 **(1)**	0839, 0840 **(2,7)**		DBus Adr 104 Loop 3	DBus Adr 107 Loop 3; 3.65 kΩ	DBus Adr 50 Xmitter 27	DBus Adr 51 Xmitter 27	DACM
28	0841 **(0)**	0842 **(0)**	0843 **(1)**	0844, 0845 **(2,8)**		DBus Adr 104 Loop 4	DBus Adr 107 Loop 4; 3.65 kΩ	DBus Adr 50 Xmitter 28	DBus Adr 51 Xmitter 28	DACM
29	0846 **(0)**	0847 **(0)**	0848 **(1)**	0849, 0850 **(2,9)**		DBus Adr 104 Loop 5	DBus Adr 107 Loop 5; 3.65 kΩ	DBus Adr 50 Xmitter 29	DBus Adr 51 Xmitter 29	DACM
30	0851 **(0)**	0852 **(0)**	0853 **(1)**	0854, 0855 **(3,0)**		DBus Adr 104 Loop 6	DBus Adr 107 Loop 6; 3.65 kΩ	DBus Adr 50 Xmitter 30	DBus Adr 51 Xmitter 30	DACM
31	0856 **(0)**	0857 **(0)**	0858 **(1)**	0859, 0860 **(3,1)**		DBus Adr 104 Loop 7	DBus Adr 107 Loop 7; 3.65 kΩ	DBus Adr 50 Xmitter 31	DBus Adr 51 Xmitter 31	DACM
32	0861 **(0)**	0862 **(0)**	0863 **(1)**	0864, 0865 **(3,2)**		DBus Adr 104 Loop 8	DBus Adr 107 Loop 8; 3.65 kΩ	DBus Adr 50 Xmitter 32	DBus Adr 51 Xmitter 32	DACM
33	0866 **(0)**	0867 **(0)**	0868 **(1)**	0869, 0870 **(3,3)**		DBus Adr 105 Loop 1	DBus Adr 107 Loop 1; 2.2 kΩ	DBus Adr 50 Xmitter 33	DBus Adr 51 Xmitter 33	DACM
34	0871 **(0)**	0872 **(0)**	0873 **(1)**	0874, 0875 **(3,4)**		DBus Adr 105 Loop 2	DBus Adr 107 Loop 2; 2.2 kΩ	DBus Adr 50 Xmitter 34	DBus Adr 51 Xmitter 34	DACM
35	0876 **(0)**	0877 **(0)**	0878 **(1)**	0879, 0880 **(3,5)**		DBus Adr 105 Loop 3	DBus Adr 107 Loop 3; 2.2 kΩ	DBus Adr 50 Xmitter 35	DBus Adr 51 Xmitter 35	DACM
36	0881 **(0)**	0882 **(0)**	0883 **(1)**	0884, 0885 **(3,6)**		DBus Adr 105 Loop 4	DBus Adr 107 Loop 4; 2.2 kΩ	DBus Adr 50 Xmitter 36	DBus Adr 51 Xmitter 36	DACM
37	0886 **(0)**	0887 **(0)**	0888 **(1)**	0889, 0890 **(3,7)**		DBus Adr 105 Loop 5	DBus Adr 107 Loop 5; 2.2 kΩ	DBus Adr 50 Xmitter 37	DBus Adr 51 Xmitter 37	DACM
38	0891 **(0)**	0892 **(0)**	0893 **(1)**	0894, 0895 **(3,8)**		DBus Adr 105 Loop 6	DBus Adr 107 Loop 6; 2.2 kΩ	DBus Adr 50 Xmitter 38	DBus Adr 51 Xmitter 38	DACM
39	0896 **(0)**	0897 **(0)**	0898 **(1)**	0899, 0900 **(3,9)**		DBus Adr 105 Loop 7	DBus Adr 107 Loop 7; 2.2 kΩ	DBus Adr 50 Xmitter 39	DBus Adr 51Xmitter 39	DACM
40	0901 **(0)**	0902 **(0)**	0903 **(1)**	0904, 0905 **(4,0)**		DBus Adr 105 Loop 8	DBus Adr 107 Loop 8; 2.2 kΩ	DBus Adr 50 Xmitter 40	DBus Adr 51 Xmitter 40	DACM

[1] DBus = Data Bus

[2] Xmitter = Transmitter

[3] DACM = DACM door contact. Integrating the DACM door contact into the security system is optional. See *DACM Configuration* on page 135 for instructions on integrating the DACM door contact into the security system.

Zone Doubling Programming

Zone doubling requires 3.65 k Ω and 2.2 k Ω EOL resistors as shown in *Table 13*. If zone doubling is not used, see *On-board Location EOL Resistor Value* on page 103, and *DX2010 Configuration Options* on page 127, for on- and off-board zone EOL resistor configuration. For proper zone doubled wiring, see the *DS7200V2 Installer's Guide* (P/N: 4998153893).

To use both on-board and off-board zone doubling at the same time, use the following steps:

1. Double Locations 1 to 8 with Locations 9 to 16.
    a. Set the Device Type for Locations 1 to 16 to 1 (on-board).
    b. Set Address 1026 (On-board Location EOL Resistor Value) to 4 (Zone doubled, 2.2 k & 3.65 k EOL resistors).
    c. Use 3.65 k EOL resistors on Locations 1 to 8, and 2.2 k EOL resistors on Locations 9 to 16.
2. Double Locations 25 to 32 with Locations 33 to 40.
    a. Set the Device Type for Locations 25 to 40 to 3 (DX2010 zone doubled).
    b. Set the DX2010's DIP switches to Address 107 (Locations 25 to 40). See *Table 14*.
    c. Use 3.65 k EOL resistors on Locations 25 to 32, and 2.2 k EOL resistors on Locations 33 to 40.

Locations 17 to 24 cannot be used for zone doubling when doubling on-board and off-board zones at the same time. These locations can still be used as RF zones, or as non-doubled zones.

Table 14: DX2010 DIP Switch Settings

DX2010 DIP Switch Settings						
DIP Switches	**S1**	**S2**	**S3**	**S4**	**S5**	**S6**
Module Address	**32**	**16**	**8**	**4**	**2**	**1**
101	OFF	OFF	OFF	OFF	OFF	OFF
102	OFF	OFF	OFF	OFF	OFF	**ON**
103	OFF	OFF	OFF	OFF	**ON**	OFF
104	OFF	OFF	OFF	OFF	**ON**	**ON**
105	OFF	OFF	OFF	**ON**	OFF	OFF
106	OFF	OFF	OFF	**ON**	OFF	**ON**
107	OFF	OFF	OFF	**ON**	**ON**	OFF

Shaded rows apply only to the DS7240V2.

Location ##, Device

- **Address:** See *Table 13* on page 80
- **Default:** See *Table 13* on page 80
- **Selections:**
  - 0 = No Device Assigned (Disabled)
  - 1 = On-board Zone (L-1 to L-8)
  - 2 = Wired Zone Expander (DX2010) (configured for 8 inputs)
  - 3 = Wired Zone Expander (DX2010) (configured for 16 inputs [zone doubled])
  - 4 = RF Receiver 1 (see *RF Receiver Configuration* on page 123)
  - 5 = RF Receiver 2 (see *RF Receiver Configuration* on page 123)
  - 6 = DACM Door Contact (see *DACM Configuration* on page 135)

Each location in the control panel can be assigned to one of four types for devices:

- The control panel's on-board sensor loops (L-1 to L-8)
- A DX2010 Input Expander
- A Data Bus RF Zone Expander (Receiver 1 or Receiver 2)
- A DACM's door contact

Use each location's Device parameter to assign the location to a device type.

You must exit control panel programming in order to enter the RF ID code. Add RF ID codes after you complete your programming session. See "Adding RF ID Codes" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for complete instructions.

Location ##, Zone Function

- **Address:** See *Table 13* on page 80
- **Default:** See *Table 13* on page 80
- **Selections:** 0 to 15 (see *Table 15* for Default Zone Function Types)

The zone function determines how the system responds to changes on the sensor loop assigned to the location. There are two general categories of zones: **24-hour** and **Controlled**.

- **24-hour Zone:** 24-hour zones are always on and cannot be turned off by the user. Faults on 24-hour zones prevent turning the system on.
- **Controlled Zone:** Controlled zones are turned on and off when the user turns the system on (armed) and off (disarmed).

See *Table 15* for Zone Function selections.

Table 15: Default Zone Function Type Selections

Zone Function Selection	Default Zone Function Type	
0	Disabled	
1	24-hour Fire, Normally Open Contact	24-Hour Zones
2	24-hour Fire with Alarm Verification, Normally Open Contact	
3	24-hour Voice Active Control Input, Normally Open Contact with EOL Resistor	
4	24-hour Tamper (no EOL resistor)	
5	24-hour Emergency (no alarm output)	
6	24-hour Visible Panic (no alarm output)	
7	24-hour Invisible Panic (no alarm output)	
8	24-hour Burglary	
9	Chime Mode only	
10	Controlled Keyswitch, Momentary, All On, Off from Any Armed State	Controlled Zones
11	Controlled Entry/Exit Delay 1	
12	Controlled Entry/Exit Delay 2	
13	Controlled Follower	
14	Controlled Instant	
15	Controlled Instant (Perimeter)	

Location ##, Area

- **Address:** See *Table 13* on page 80
- **Default:** 1 (Area 1)
- **Selections:**
  - 0 = No Area Assigned (Disabled)
  - 1 = Assign Location ## to Area 1
  - 2 = Assign Location ## to Area 2
  - 3 = Assign Location ## to Area 3 (DS7240V2 only)
  - 4 = Assign Location ## to Area 4 (DS7240V2 only)

This parameter assigns an area to a location. Each location can only be assigned to one area.

Location ##, Zone Number

- **Address:** See *Table 13* on page 80
- **Default:** See *Table 13* on page 80
- **Selections:** 0,1 to 4,0

This parameter determines the zone number that appears on keypad displays, the control panel event log and at the optional printer. This is also the zone number reported to the ARC.

This parameter can be used to create a Zone 1 for each Area.

Location ##, Zone Text

- **Address:** See *Table 16*
- **Default:** See *Table 16*
- **Selections:** See *Table 3* on page 7

Table 16: Location Text Addresses/Defaults

Location	Address	Default		Location	Address	Default
1	1650	Location 1 Text		21	2290	Location 21 Text
2	1682	Location 2 Text		22	2322	Location 22 Text
3	1714	Location 3 Text		23	2354	Location 23 Text
4	1746	Location 4 Text		24	2386	Location 24 Text
5	1778	Location 5 Text		25	2418	Location 25 Text
6	1810	Location 6 Text		26	2450	Location 26 Text
7	1842	Location 7 Text		27	2482	Location 27 Text
8	1874	Location 8 Text		28	2514	Location 28 Text
9	1906	Location 9 Text		29	2546	Location 29 Text
10	1938	Location 10 Text		30	2578	Location 30 Text
11	1970	Location 11 Text		31	2610	Location 31 Text
12	2002	Location 12 Text		32	2642	Location 32 Text
13	2034	Location 13 Text		33	2674	Location 33 Text
14	2066	Location 14 Text		34	2706	Location 34 Text
15	2098	Location 15 Text		35	2738	Location 35 Text
16	2130	Location 16 Text		36	2770	Location 36 Text
17	2162	Location 17 Text		37	2802	Location 37 Text
18	2194	Location 18 Text		38	2834	Location 38 Text
19	2226	Location 19 Text		39	2866	Location 39 Text
20	2258	Location 20 Text		40	2898	Location 40 Text

All control panel text is programmed from the text keypad in a special text-programming mode. See *Text Entry Addresses* on page 7 for text programming instructions.

Enter up to 16 characters to describe each location.

Shaded cells only apply to the DS7240V2.

RF Transmitters and Zone States

With the exception of the point transmitter, all RF transmitters show only two electrical zone states (Normal and Faulted).

The RF3401E Point Transmitter can monitor both a reed switch (magnet) and a supervised sensor loop. After the door/window transmitter's ID is added, the control panel shows one of the following status messages depending on how the door/window transmitter is configured:

- "No magnet, no loop": the reed switch is open (no magnet is present), and there is no device connected to the sensor loop
- "Reed switch closed": the reed switch is closed by a magnet
- "Loop closed": a device is connected to the sensor loop
- "Reed closed, loop closed": the reed switch is closed by a magnet, and a device is connected to the sensor loop

The RF3405E Inertia Transmitter operates similarly as the RF3401E described above, however the RF3405E can monitor both a reed switch (magnet) and a supervised sensor loop or a reed switch and an inertia sensor loop. It cannot monitor a supervised sensor loop and an inertia sensor loop.

For this example, mount the point transmitter on a doorjamb, and mount its magnet on the door. Close the door to place the magnet next to the reed switch. The control panel now recognizes the reed switch to be in a normal (not faulted) state. From this point forward, it shows the zone (door/window transmitter) as shorted (faulted) whenever it sees the reed switch faulted. It shows the zone as normal when the reed switch returns to normal, even though the sensor loop remains faulted.

To continue with this example, connect a contact on a window near the door. Wire the contact and the EOL resistor to the Door/Window transmitter's sensor loop and close the window. The control panel now recognizes the sensor loop to be in a normal (not faulted) state. From this point forward, it shows the zone (door window transmitter) as faulted whenever it sees either the sensor loop or the reed switch faulted. It only shows the zone as normal when both the reed switch and the sensor loop return to normal. When only the reed switch is monitored, only the Normal and Shorted (Faulted) zone states are shown.

Cut out reed switch if not used.

Disabling a Zone (RF or Wired)

To disable a wired or wireless (RF) zone, do any of the following:

- Set the location's device parameter to 0 (zero). See *Location ##, Device* on page 83.
- Set the location's zone function parameter to 0 (zero). See *Location ##, Zone Function* on page 84.
- Set the location's area parameter to 0 (zero). See *Location ##, Area* on page 85.

4.5.2 Zone Function Configuration

The control panel can monitor any combination of up to 40 sensor loops and/or RF transmitters. Each sensor loop or transmitter is assigned to a location. Each location is assigned to one of 15 Zone Functions so that the control panel knows how to respond to sensor loop or transmitter changes.

See *Table 17* for Zone Function Configuration parameter addresses and defaults (**defaults are shown in bold**).

Table 17: Zone Function Configuration Parameters

Zone Function	Zone Function Type	Pulse Count	Pulse Count Time	Options 1	Options 2	Report Enable Trouble Response	Alarm Route	Restoral Route
1	Adr 0906 **(1: 24-hr Fire)**	Adr 0907 **(0)**	Adr 0908 **(0)**	Adr 0909 **(0)**	Adr 0910 **(2)**	Adr 0911 **(11)**	Adr 0912 **(1)**	Adr 0913 **(1)**
2	Adr 0914 **(2: 24-hr Fire with Verify)**	Adr 0915 **(0)**	Adr 0916 **(0)**	Adr 0917 **(0)**	Adr 0918 **(7)**	Adr 0919 **(9)**	Adr 0920 **(1)**	Adr 0921 **(1)**
3	Adr 0922 **(3: 24-hr Control Input)**	Adr 0923 **(0)**	Adr 0924 **(0)**	Adr 0925 **(1)**	Adr 0926 **(0)**	Adr 0927 **(10)**	Adr 0928 **(1)**	Adr 0929 **(1)**
4	Adr 0930 **(4: 24-hr Tamper)**	Adr 0931 **(0)**	Adr 0932 **(0)**	Adr 0933 **(8)**	Adr 0934 **(7)**	Adr 0935 **(9)**	Adr 0936 **(1)**	Adr 0937 **(1)**
5	Adr 0938 **(5: 24-hr Emergency)**	Adr 0939 **(0)**	Adr 0940 **(0)**	Adr 0941 **(0)**	Adr 0942 **(5)**	Adr 0943 **(9)**	Adr 0944 **(1)**	Adr 0945 **(1)**
6	Adr 0946 **(6: 24-hr Visible Panic)**	Adr 0947 **(0)**	Adr 0948 **(0)**	Adr 0949 **(0)**	Adr 0950 **(5)**	Adr 0951 **(9)**	Adr 0952 **(1)**	Adr 0953 **(1)**
7	Adr 0954 **(7: 24-hr Invisible Panic)**	Adr 0955 **(0)**	Adr 0956 **(0)**	Adr 0957 **(0)**	Adr 0958 **(5)**	Adr 0959 **(9)**	Adr 0960 **(1)**	Adr 0961 **(1)**
8	Adr 0962 **(8: 24-hr Burglary)**	Adr 0963 **(0)**	Adr 0964 **(0)**	Adr 0965 **(0)**	Adr 0966 **(7)**	Adr 0967 **(9)**	Adr 0968 **(1)**	Adr 0969 **(1)**
9	Adr 0970 **(0: Chime Mode only)**	Adr 0971 **(0)**	Adr 0972 **(0)**	Adr 0973 **(0)**	Adr 0974 **(0)**	Adr 0975 **(9)**	Adr 0976 **(1)**	Adr 0977 **(1)**
10	Adr 0978 **(10: Controlled Keyswitch)**	Adr 0979 **(0)**	Adr 0980 **(0)**	Adr 0981 **(8)**	Adr 0982 **(7)**	Adr 0983 **(9)**	Adr 0984 **(1)**	Adr 0985 **(1)**
11	Adr 0986 **(11: Entry/Exit Delay 1)**	Adr 0987 **(0)**	Adr 0988 **(0)**	Adr 0989 **(0)**	Adr 0990 **(7)**	Adr 0991 **(9)**	Adr 0992 **(1)**	Adr 0993 **(1)**
12	Adr 0994 **(12: Entry/Exit Delay 2)**	Adr 0995 **(0)**	Adr 0996 **(0)**	Adr 0997 **(0)**	Adr 0998 **(7)**	Adr 0999 **(9)**	Adr 1000 **(1)**	Adr 1001 **(1)**
13	Adr 1002 **(13: Controlled Follower)**	Adr 1003 **(0)**	Adr 1004 **(0)**	Adr 1005 **(0)**	Adr 1006 **(7)**	Adr 1007 **(9)**	Adr 1008 **(1)**	Adr 1009 **(1)**
14	Adr 1010 **(14: Controlled Instant)**	Adr 1011 **(0)**	Adr 1012 **(0)**	Adr 1013 **(0)**	Adr 1014 **(7)**	Adr 1015 **(9)**	Adr 1016 **(1)**	Adr 1017 **(1)**
15	Adr 1018 **(14: Controlled Instant)**	Adr 1019 **(0)**	Adr 1020 **(0)**	Adr 1021 **(4)**	Adr 1022 **(7)**	Adr 1023 **(9)**	Adr 1024 **(1)**	Adr 1025 **(1)**

Zone Wiring Configuration

The operation and configuration of the zone function depends on the method of zone wiring. A zone is a "Single EOL resistor" zone if the zone is supervised with one end of line resistor. *Table 18* defines configuration options for single EOL resistor zones.

Table 18: Single EOL Resistor Zone Configuration Options

Device Selection as shown in *Table 13*	Address for Zone Wiring Configuration Options	Configuration Options
1	1026	1, 2, 3
2	1257 to 1261	4 to 11
4 or 5	1249	4 to 7

For On-board zones, device is 1. See *On-board Location EOL Resistor Value* on page 103.

For Wired-Expander zones, device is 2. See *DX2010 Configuration Options* on page 127.

For RF zones, Device is 4 or 5. See *RF Receiver Configuration* on page 123.

Tamper-wired zones, Zone-doubled zones, or No EOL resistor zones function differently. These non-single EOL resistor zones are defined by the configuration options shown in *Table 19*.

Table 19: Tamper-wired, Zone Doubled, and No EOL Resistor Zone Configuration Options

Device Selection as shown in *Table 13*	Address for Zone Wiring Configuration Options	Configuration Options
1	1026	0, 4, 5, 6
2	1257 to 1261	0 to 3
3	N/A	Always
4 or 5	1249	0 to 3

Zone Function Type, Zone Function

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0 to 15 (see *Table 20*)

See *Table 20* for a description of each zone function type and the events and reports associated with that Zone Function type, when the zone is wired using one of the following configurations: single EOL resistor, tamper-wired, zone-doubled, or no EOL resistor.

- **Controlled Zone:** Controlled zones are turned on and off when the user turns the system on (armed) and off (disarmed).
- **24-hour Zone:** 24-hour zones are always on and cannot be turned off by the user.

Table 20: Zone Function Type Options

Zone Function Type		Wiring Configuration	Description	Events/Reports
0	Chime Mode Only	Single EOL Resistor	No alarm or trouble response to opens or shorts (Chime Mode only).	No events/reports.
		Tamper-Wired, Zone-Doubled, No EOL Resistor	No alarm or trouble response to faults (Chime Mode only).	
1	24-hr Fire	Single EOL Resistor	Short on sensor loop starts Fire Alarm response. Open on sensor loop starts trouble response. Activates Fire Alarm Output (Temporal Code 3).	Fire Alarm {75-77}, Fire Missing {78}, Fire Restore from Alarm {79}, Fire Restore from Missing {174}, Fire Trouble {80}, Fire Trouble Restore {81}, Fire Bypass {26-27}, Swinger Shunt {33}, Restoral from Swinger Shunt {173}, Fire Unbypass {34}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault on sensor loop starts Fire Alarm response. Activates Fire Alarm Output (Temporal Code 3).	
2	24-hour Fire with Alarm Verification	Single EOL Resistor	Short on sensor loop starts the verification process. Control panel activates Fire Verification output function for 15 sec to reset smoke detectors. See *Table 25* on page 112 for Fire Verification Output Function information. Short on sensor loop within 120 sec of reset starts alarm response. If zone remains normal or open for the 120-second verification window, there is no alarm response. Open on sensor loop starts trouble response. Activates Fire Alarm Output (Temporal Code 3).	Fire Alarm {75}, Fire Unverified {77}, Fire Missing {78}, Fire Restore from Alarm {79}, Fire Restore from Missing {174}, Fire Trouble {80}, Fire Trouble Restore {81}, Fire Bypass {26-27}, Fire Unbypass {34}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault on sensor loop starts the verification process. Control panel activates Fire Verification output function for 15 sec to reset smoke detectors. See *Table 25* on page 112 for Fire Verification Output Function information. Fault on sensor loop within 120 sec of reset starts alarm response. If zone remains normal for the 120-second verification window, there is no alarm response. Activates Fire Alarm Output (Temporal Code 3).	Fire Alarm {75}, Fire Unverified {77}, Fire Missing {78}, Fire Restore from Alarm {79}, Fire Restore from Missing {174}, Fire Bypass {26-27}, Fire Unbypass {34}
3	24-hr Control Input	Single EOL Resistor	Can be used to control various system functions. See *Options 1 for Zone Function Type 3 (24-hr Control Input)* on page 97 for more information. Only Trouble on Open option is available.	Trouble {139}, Trouble Restore {146}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Can be used to control various system functions. See *Options 1 for Zone Function Type 3 (24-hr Control Input)* on page 97 for more information.	No events/reports.

Table 20: Zone Function Type Options (continued)

Zone Function Type		Wiring Configuration	Description	Events/Reports
4	24-hr Tamper	Single EOL Resistor	Can create a Tamper Alarm or a Tamper Trouble based on option programming. See *Options 1 for Zone Function Type 4 (24-Hour Tamper)* on page 98 for more information. Short or Open causes alarm response if no Trouble Option.	Alarm {3}, Cross Alarm {10}, Unverified Cross {17}, Bypass {30-31}, Swinger Shunt {33}, Unbypass {36}, Swinger Shunt Restore {173}, Trouble {139}, Trouble Restore {146}, Missing Trouble {88}, Restore from Alarm {112}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Can create a Tamper Alarm or a Tamper Trouble based on option programming. See *Options 1 for Zone Function Type 4 (24-Hour Tamper)* on page 98 for more information. Fault causes alarm response if no Trouble Option.	
5	24-hr Emergency	Single EOL Resistor	Short or open causes alarm response if no Trouble Option.	Alarm {4}, Cross Alarm {11}, Unverified Cross {17}, Bypass {30-31}, Swinger Shunt {33}, Unbypass {36}, Swinger Shunt Restore {173}, Trouble {140}, Trouble Restore {147}, Missing Trouble {88}, Restore from Alarm {113}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault causes alarm response if no Trouble Option.	
6	24-hour Visible Panic	Single EOL Resistor	Short or open causes alarm response if no Trouble Option.	Alarm {5}, Cross Alarm {12}, Unverified Cross {17}, Bypass {30-31}, Swinger Shunt {33}, Unbypass {36}, Swinger Shunt Restore {173}, Trouble {141}, Trouble Restore {148}, Missing Trouble {88}, Restore from Alarm {114}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault causes alarm response if no Trouble Option.	
7	24-hr Invisible Panic	Single EOL Resistor	Short or open causes alarm response if no Trouble Option. **No alarm tones or alarm display at keypad even if the Alarm Output option is enabled.**	Alarm {6}, Cross Alarm {13}, Unverified Cross {17}, Bypass {30-31}, Swinger Shunt {33}, Unbypass {36}, Swinger Shunt Restore {173}, Trouble {142}, Trouble Restore {149}, Missing Trouble {88}, Restore from Alarm {115}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault causes alarm response if no Trouble Option. **No alarm tones or alarm display at keypad even if the Alarm Output option is enabled.**	
8	24-hr Burglary	Single EOL Resistor	Short or open causes alarm response if no Trouble Option. Trouble option generates alarm response when Area is armed All On/Perimeter Only/Partial On, Trouble response when area is Off.	Burglary {7}, Cross Alarm {14}, Unverified Cross {17}, Bypass {30-31}, Swinger Shunt {33}, Unbypass {36}, Swinger Shunt Restore {173}, Trouble {143}, Trouble Restore {150}, Missing Alarm {87}, Missing Trouble {88}, Restore from Alarm {116}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Fault causes alarm response if no Trouble Option. Trouble option generates alarm response when Area is armed All On/Perimeter Only/Partial On, Trouble response when area is Off.	
9	Reserved			
10	Controlled Keyswitch	Single EOL Resistor	See *Options 1 for Zone Function Type 10 (Controlled Keyswitch)* on page 98 for more information. Can be programmed for a momentary or maintained keyswitch. Can also be programmed as Exit Terminator Button. See "Keyswitch" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for additional keyswitch information.	Alarm {9}, Bypass {28,29}, Forced Pt {32}, Swinger Shunt {33}, Unbypass {35}, Swinger Shunt Restore {173}, Trouble {145}, Trouble Restore {152}, Missing Alarm {87}, Missing Trouble {88}, Restore from Alarm {118}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor		

Table 20: Zone Function Type Options (continued)

Zone Function Type		Wiring Configuration	Description	Events/Reports
11	Controlled Entry/Exit Delay 1	Single EOL Resistor	When control panel is On, short or open starts Entry Delay 1 if no Trouble Option. Follows Entry Delay 1 or 2. Follows Exit Delay. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated. Entry/Exit Delay and Start Entry Delay settings are ignored for trouble events.	Alarm {8}, Cross Alarm {15}, Unverified Cross {17}, Bypass {28,29}, Forced Pt {32}, Swinger Shunt {33}, Unbypass {35}, Swinger Shunt Restore {173}, Trouble {144}, Trouble Restore {151}, Missing Alarm {87}, Missing Trouble {88}, Restore from Alarm {117}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	When control panel is On, fault starts Entry Delay 1 if no Trouble Option. Follows Entry Delay 1 or 2. Follows Exit Delay. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated. Entry/Exit Delay and Start Entry Delay settings are ignored for trouble events.	
12	Controlled Entry/Exit Delay 2	Single EOL Resistor	When control panel is On, short or open starts Entry Delay 2 if no Trouble Option. Follows Entry Delay 1 or 2. Follows Exit Delay. If this Zone Function type is faulted or bypassed at the start of Exit Delay or during Exit Delay, Exit Time is set to Exit Delay 2. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated. Entry/Exit Delay and Start Entry Delay settings are ignored for trouble events.	Alarm {8}, Cross Alarm {15}, Unverified Cross {17}, Bypass {28,29}, Forced Pt {32}, Swinger Shunt {33}, Unbypass {35}, Swinger Shunt Restore {173}, Trouble {144}, Trouble Restore {151}, Missing Alarm {87}, Missing Trouble {88}, Restore from Alarm {117}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	When control panel is On, fault starts Entry Delay 2 if no Trouble Option. Follows Entry Delay 1 or 2. Follows Exit Delay. If this Zone Function type is faulted or bypassed at the start of Exit Delay or during Exit Delay, Exit Time is set to Exit Delay 2. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated. Entry/Exit Delay and Start Entry Delay settings are ignored for trouble events.	
13	Controlled Follower	Single EOL Resistor	Follows Exit Delay. Follows, but cannot start Entry Delay. Instant if first. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated. Entry/Exit Delay and Start Entry Delay settings are ignored for trouble events.	Alarm {9} reports, Cross Alarm {16}, Unverified Cross {17}, Bypass {28,29}, Forced Pt {32}, Swinger Shunt {33}, Unbypass {35}, Missing Alarm {87}, Swinger Shunt Restore {173}, Trouble {145}, Trouble Restore {152}, Missing Trouble {88}, Restore from Alarm {118}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor		

Table 20: Zone Function Type Options (continued)

Zone Function Type		Wiring Configuration	Description	Events/Reports
14	Controlled Instant	Single EOL Resistor	When armed, short or open causes alarm response. Short or open during Entry/Exit Delay creates an instant alarm, which terminates the Exit Delay period (see *Panel Arming Options* on page 46). If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated.	Alarm {9} reports, Cross Alarm {16}, Unverified Cross {17}, Bypass {28,29}, Forced Pt {32}, Swinger Shunt {33}, Unbypass {35}, Missing Alarm {87}, Swinger Shunt Restore {173}, Trouble {145}, Trouble Restore {152}, Missing Trouble {88}, Restore from Alarm {118}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	When armed, fault causes alarm response. Fault during Entry/Exit Delay creates an instant alarm, which terminates the Exit Delay period (see *Panel Arming Options* on page 46). If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated.	
15	24-hr Door	Single EOL Resistor	Does not follow Entry or Exit Delay. Short or open during Entry/Exit Delay creates an instant alarm, which terminates the Exit Delay period (see *Panel Arming Options* on page 46). When the zone is faulted, and the area is disarmed, a timer starts. If the zone remains faulted for the programmed time (see *Pulse Count Time* on page 94), the zone creates an alarm. If the zone is restored before the programmed time ends, no alarm is created. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated.	Alarm, 24-hour Burg {7}, Restoral, 24-hour Burg {116}, Trouble, 24-hour Burg {143}, Restoral, 24-hour Burg {150}, RF BatteryLow {121}, RF Battery Restoral {122}, RF Tamper Trouble {123}, RF Tamper Restoral {124}, Restore from Missing Alarm {175}, Restore from Missing Trouble {176}
		Tamper-Wired, Zone-Doubled, No EOL Resistor	Does not follow Entry or Exit Delay. Fault during Entry/Exit Delay creates an instant alarm, which terminates the Exit Delay period (see *Panel Arming Options* on page 46). When the zone is faulted, and the area is disarmed, a timer starts. If the zone remains faulted for the programmed time (see *Pulse Count Time* on page 94), the zone creates an alarm. If the zone is restored before the programmed time ends, no alarm is created. If this Zone Function type is programmed for Trouble and a trouble condition occurs when the control panel is armed, an alarm event is generated. If a trouble condition occurs when the control panel is disarmed, a trouble event is generated.	

Pulse Count

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:**
  - 0 = Activate on first off-normal, debounce on-board points for 160 ms
  - 1 = Activate on first off-normal, debounce on-board points for 50 ms
  - 2-15 = number of pulses required within the programmed Pulse Count Time for an alarm to occur

This parameter determines the number of times a sensor loop must pulse (electronically off-normal) in the Pulse Count Time before the control panel declares the zone faulted. This applies to both on- and off-board zones.

- Setting the Pulse Count to 0 (zero) tells the control panel to look for 1 pulse lasting at least 160 ms before declaring the zone faulted.
- Setting the Pulse Count to 1 tells the control panel to look for 1 pulse lasting at least 50 ms before declaring the zone faulted.

Leave the Pulse Count parameter at the default setting (0) unless advised by Bosch Technical Service.

If a single pulse starts the Pulse Count Timer and lasts 20 sec, the control panel declares the zone faulted regardless of the Pulse Count.

Pulse Count Time

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0-15 (see *Table 21* and *Table 22*)

When the control panel detects a pulse (electronically off-normal), it starts a timer and waits the time selected in this parameter to reach the Pulse Count and declare the zone faulted.

The Pulse Count Time only applies when the Pulse Count is greater than 1, or the 24-Hour Door Zone Function Type is selected.

Use *Table 21* when *Location ##, Device* is set to 1 (on-board zone). Use *Table 22* when *Location ##, Device* is set to 2, 3, 4, or 5 (off-board zones).

If a single pulse starts the Pulse Count Timer and lasts 20 sec, the control panel declares the zone faulted regardless of the Pulse Count.

Table 21: On-board Zone Pulse Count Time Selections

Pulse Count Time Selections for 50 ms Zone Scan Time (on-board zones)			Pulse Count Time Selections for 160 ms Zone Scan Time (on-board zones)	
Selection	**Pulse Count Time**		**Selection**	**Pulse Count Time**
0	0.5 sec		8	20 sec
1	1 second		9	30 sec
2	2 sec		10	40 sec
3	3 sec		11	50 sec
4	4 sec		12	60 sec
5	5 sec		13	90 sec
6	10 sec		14	120 sec
7	15 sec		15	200 sec

Table 22: Off-board Zone Pulse Count Time Selections

Pulse Count Time for Off-board Zones			
Selection	**Pulse Count Time**	**Selection**	**Pulse Count Time**
0	10 sec	8	20 sec
1	20 second	9	30 sec
2	40 sec	10	40 sec
3	60 sec	11	50 sec
4	80 sec	12	60 sec
5	100 sec	13	90 sec
6	200 sec	14	120 sec
7	300 sec	15	200 sec

Pulse Count/Pulse Count Time Example:

Follow these steps to program a zone function to detect four 60 ms pulses within 10 sec before it declares the zone off-normal:

1. Enter "4" in the Pulse Count address of the Zone Function you are configuring. "4" identifies the number of pulses the control panel must receive.
2. Since your time span is 10 sec, this zone function uses a zone scan time of 60 ms and is only for on-board zones (see left side of *Table 21*). The selection for 10 sec is 6. Enter "6" into the Pulse Count Time address of the Zone Function you are configuring.

When using the 24-Hour Door Zone Function Type, Pulse Count Time determines how long the zone must be faulted when the area is disarmed before creating an alarm on the zone (range of 0.5 to 300 sec).

Options 1, Zone Function ##

Options 1 for Zone Function Types 0 to 2, 5 to 8, 11 to 15

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Options 1, Zone Function	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Enabled	•															
Enable Alarm Event Abort		•		•		•		•		•		•		•		•
Voice Verification			•	•			•	•			•	•			•	•
Armed for Perimeter Only Mode					•	•	•	•					•	•	•	•
Sensor Trouble Monitor									•	•	•	•	•	•	•	•

The option chart above applies to all zone function types **except** the following:

- Zone Function Type 3 (24-hr Control Input)
- Zone Function Type 4 (24-hr Tamper)
- Zone Function Type 10 (Controlled Keyswitch)

The following sub-sections explain how to program the zone function types listed above.

Zone Function Type 9 is reserved and cannot be programmed.

- **Alarm Event Abort** (**Non-Fire Zones Only**)**:** If enabled, this option assigns the Abort Window to a zone function. See *Alarm Event Abort Window* on page 106 to learn how to set the Alarm Event Abort Window.
  - If a user acknowledges a non-fire alarm zone event by entering their PIN before the Alarm Event Abort Window expires, the following events occur:
  - The alarm event is aborted. Alarm, Cancel and Restoral reports associated with the alarm are not transmitted and the event becomes a Local Only event.
  - A Cancel window starts with the initiation of the alarm event and follows the Bell Time. If the user acknowledges the alarm inside the Cancel window (Bell Time), a Cancel {38} or a Fire Cancel {39} report is sent. If the Abort Window is enabled, the Cancel report is sent if the user acknowledges the alarm after the Abort window has expired, but before the Bell Time expires.
  - The user hears a unique three long beep tone at the keypad.
  - The text keypads indicate that the alarm was aborted on the display. It appears as a slow flash in Alarm Memory at LED keypads.

The Alarm Event Abort option has no effect on Fire and Fire with Verification Zone Function types.

This option does not apply to alarm events initiated by the ABC Keys, the Duress PIN or the keyfob Panic function.

- **Voice Verification:** If enabled, this option allows the control panel to control a 2-way Voice Verification Module. This module allows the ARC personnel to verify alarms with a two-way voice session with the premises. There are two other module connections to the control panel: the programmable relay output programmed with the Voice Request output function, and a zone programmed as a Voice Active zone. The control panel must also have one or more zones with the Voice Verification option selected.
  - When a zone with Voice Verification generates an alarm event, the following events occur:
  - The control panel transmits the alarm report to the receiver at the ARC.
  - When the ARC receiver acknowledges the report, the control panel activates the Voice Request output function. All reports are delayed. The Voice Verification Module has 30 sec to start a verification session.
  - The verification module shorts the Voice Active input when it starts a verification session.
  - When the Voice Active zone is shorted, the control panel silences the non-fire alarm outputs. Only the user can silence a fire alarm output.
  - As long as the Voice Active zone is shorted, the control panel continues to keep reports buffered.
  - The Voice Verification Module ends the voice session by removing the short from the Voice Active zone. Normal reporting (communication) resumes. If any Bell Time remains, the alarm outputs activate for the remainder of Bell Time.
- **Armed for Perimeter Only Mode:** If enabled, this option determines the zones that arm when the user arms the system Perimeter Only. Only those zones assigned to a Zone Function (Controlled Zone Function types) with this option enabled are armed.

If a 24-Hour Door Zone is configured for Perimeter Only arming, it functions as a Controlled Instant zone when the area is armed Perimeter Only. If the zone is not configured for Perimeter Only arming, then it functions as a 24-Hour Door zone when the area is armed Perimeter Only (timer begins when zone is faulted).

- **Sensor Trouble Monitor:** This option enables/disables reporting the sensor trouble monitor fault condition. This option does not apply to fire zone types or non-fire 24-hour zone types. See *Sensor Monitor Time* on page 105 for a complete description of the Sensor Trouble Monitor parameter.

Options 1 for Zone Function Type 3 (24-hr Control Input)

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 1 to 4, 9 to 12

The 24-hour Control Input zone function type uses the following parameter option chart.

	Enter This Data Digit to Select Options															
24-hour Control Input Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Voice Active Control Input		•								•						
Alternate Communication Path Fault Input			•								•					
Alarm Reset Control Input				•								•				
Silence Outputs Control Input					•								•			
No EOL Resistor Required										•	•	•	•			

- **Voice Active Control Input:** If enabled, this option functions as a Voice Active zone. The control panel must be off-hook and sending a report from a zone with the Voice Verification option selected. If the input goes into "alarm" within 30 sec after the report is sent, all alarm outputs and keypad sounders assigned to the same area as the input zone are silenced. Activation of this input does not create any events in the history log or send any reports. When the input restores from "alarm," the audible devices will resume sounding if any bell time remains. The keypad sounders return to the alarm sound.
- **Alternate Communication Path Fault Control Input:** If enabled, this option allows various external modules to be connected for sending reports. This option also allows an external module to signal that it is unable to send reports. When this option goes into "alarm," the control panel initiates a System Trouble condition. Event 167 is placed in the history log and its report is sent if there is means of sending the report. When this input restores from "alarm," Event 168 is placed in the history log and its report is sent. The System Trouble condition clears based on the configuration of the "Phone Line Fault Requires Reset" option (see *Phone Line Options* on page 14).
- **Alarm Reset Control Input:** If enabled, this option allows the ARC to communicate with the control panel through an external module and remotely reset the area. This reset can only occur if the control panel is disarmed. Activation of this option does not create any events in the history log or send any reports.
- **Silence Outputs Control Input:** If enabled, this option functions as a bell silence zone. When the input goes into "alarm," all alarm outputs and keypad sounders assigned to the same area as the input zone are silenced. The conditions are silenced as soon as the input goes active. Activation of this input does not create any events in the history log or send any reports. When the input restores from "alarm," the audible devices resume sounding if any bell time remains. The keypad sounders return to the alarm sound.
- **No EOL Resistor Required:** This option determines whether the input zone functions with normal EOL resistor supervision or without any EOL resistor supervision.

Options 1 for Zone Function Type 4 (24-Hour Tamper)

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0, 2, 8, 10

The 24-hour Tamper zone function type uses the following parameter option chart.

	Enter This Data Digit to Select Options															
24-hour Tamper Input Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Reserved																
Voice Verification			•								•					
Reserved																
No EOL Resistor Required									•		•					

See the option descriptions for "Voice Verification" and "No EOL Resistor Required" in *Options 1 for Zone Function Type 3 (24-hr Control Input)* on page 97.

Options 1 for Zone Function Type 10 (Controlled Keyswitch)

- **Address:** See *Table 17*
- **Default:** 8 (Momentary, All On, Off from Any Armed State)
- **Selections:**
  - 0 = Maintained, All On, Off from Any Armed State
  - 1 = Maintained, All On, No Off
  - 2 = Maintained, No On, Off from Any Armed State
  - 4 = Maintained, Perimeter Only, Off from Any Armed State
  - 5 = Maintained, Perimeter Only, No Off
  - 6 = Maintained, No On, Off from Perimter Only or Partial On Arming
  - 8 = Momentary, All On, Off from Any Armed State
  - 9 = Momentary, All On, No Off
  - 10 = Momentary, No On, Off from Any Armed State
  - 12 = Momentary, Perimeter Only, Off from Any Armed State
  - 13 = Momentary, Perimeter Only, No Off
  - 14 = Momentary, No On, Off from Perimeter Only or Partial On Arming
  - 15 = Exit Terminator Button
- **Momentary Keyswitch:** To silence alarms (stop Alarm output), operate the keyswitch. If the area is armed, operating the keyswitch to silence the alarm also disarms the area. If the area is disarmed, operating a momentary keyswitch to silence the alarm does not arm the area.
- **Maintained Keyswitch:** To silence alarms (stop Alarm output) while the area is armed, turn the keyswitch to the disarmed position. The control panel disarms the area and silences alarms. To silence alarms (stop Alarm output) while the area is disarmed, turn the keyswitch to the armed position (the control panel does not arm) and then return to the disarmed position.
- **Exit Terminator Button:** This zone function activates in the same manner as the momentary keyswitch. When Exit Delay is active, operating the exit terminator button terminates Exit Delay and immediately arms the control panel. If Chime Mode is enabled and Exit Delay is not active, pressing the exit terminator button activates the chime tone and the button functions as a doorbell.

Options 2, Zone Function ##

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- Selections: 0 to 15

	Enter This Data Digit to Select Options															
Options 2, Zone Function	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Enabled	•															
Swinger Shunt		•		•		•		•		•		•		•		•
Alarm Output			•	•			•	•			•	•			•	•
Can Be Bypassed or Force Armed					•	•	•	•					•	•	•	•
Cross-Zone									•	•	•	•	•	•	•	•

- **Swinger Shunt:** If enabled, this option activates Swinger Shunt functions for Alarm Output (Functions 1|5, 1|8 to 1|12, and 8|8) and Zone Reporting. See *Swinger Count for Zone Reports* on page 105 for additional Swinger information.
- **Alarm Output:** If enabled, this option activates the alarm output functions (Output Function 1|8 to 1|12, and 8|8, see *Output Parameters* on page 107) for alarm events.
- **Can Be Bypassed or Force Armed:** Only zones assigned to a Zone Function with this option enabled can be bypassed or force armed. Bypassed zones remain bypassed for the arming cycle. Force armed zones return to the system automatically if they restore during the arming cycle. 24-hour zones (fire and non-fire) can be made bypassable with this option.
- **Cross-Zone:** If enabled, this option creates a Cross-Zone Zone Function type using the following conditions:
  - When any zone assigned to the Cross-Zone Function detects a pulse, the control panel starts a 60-second timer.
  - If a second zone assigned to the same Cross-Zone Function detects a pulse, the control panel creates a Cross-Zone Alarm event for both zones.
  - A second pulse on the first zone does not create an alarm event.
  - If a single pulse on a Cross-Zone lasts 20 sec, the control panel creates an alarm event for that zone only; it is not a Cross-Zone event.
  - If programmed for unverified event reporting (see *Zone Response Options* on page 103), the control panel sends an Unverified Cross {17} or a Fire Unverified {77} report when a pulse is detected without another cross zone pulse to verify it. The Unverified event is not sent until the 60-second timer that starts when the first zone is violated has expired.

Do not configure 24-Hour Door and 24-Hour Fire with Alarm Verification zone function types as Cross-Zones.

Reporting Enable, Trouble Response Options, Zone Function ##

Single EOL Resistor Configuration

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Reporting Enable, Trouble Response Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alarm or Trouble Reports	•															
Alarm Reports Enabled		•		•		•		•		•		•		•		•
Trouble Response on Open			•	•			•	•			•	•			•	•
Trouble Response on Short					•	•	•	•					•	•	•	•
Alarm Restoral Reports Enabled									•	•	•	•	•	•	•	•

Use the option parameter key above if the zone is configured for a single EOL resistor. See *Zone Wiring Configuration* on page 89 for more information.

The trouble response for non-24-hour zones and 24-hour burglary Zone Function types occurs only when their area is disarmed. When armed, any zone fault generates an alarm response. Other 24-hour zone types (Tamper, Emergency, Panic and Invisible) always have trouble response as programmed.

Fire zone types always have Trouble Response on Open and Alarm Response on Short regardless of programming.

- **Alarm Reports Enabled:** If this option is enabled, the system generates Alarm reports.
- **Trouble Response on Open:** If this option is enabled, an open circuit generates a Trouble response.
- **Trouble Response on Short:** If this option is enabled, a shorted circuit generates a Trouble response.
- **Alarm Restoral Reports Enabled:** If this option is enabled, the system generates Alarm Restoral reports.

No EOL Resistor, Zone Doubling, or Tamper-wired Configuration

- **Address:** See *Table 17* on page 88
- **Default:** See *Table 17* on page 88
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Reporting Enable, Trouble Response Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alarm or Trouble Reports	•															
Alarm Reports Enabled		•		•		•		•		•		•		•		•
Normally Open Sensor Contacts			•	•			•	•			•	•			•	•
Trouble Response on Off-Normal					•	•	•	•					•	•	•	•
Alarm Restoral Reports Enabled									•	•	•	•	•	•	•	•

The Reporting Enable/Trouble Response options are modified when the input zone is configured for no EOL resistor, zone doubling, or tamper-wired operation. See *Zone Wiring Configuration* on page 89 for more information.

- **Alarm Reports Enabled:** If this option is enabled, the system generates Alarm reports.
- **Normally Open Sensor Contacts:** Enable this option when the sensor contacts are Normally Open and shorted contacts create a fault. Disable this option when the contacts are Normally Closed and an open condition creates a fault.

Most RF zones require the zone function to be configured with Normally Open sensor contacts disabled.

- **Trouble Response on Off-Normal:** If this option is enabled, an off-normal condition generates a Trouble response. The trouble response for non-24-hour zones and 24-hour burglary Zone Function types occurs only when the zones are disarmed. When armed, any zone fault generates an alarm response. Other 24-hour zone types (Tamper, Emergency, Panic and Invisible) always have trouble response as programmed.
- **Alarm Restoral Reports Enabled:** If this option is enabled, the system generates Alarm Restoral reports.

Alarm Report Routing, Zone Function ##

- **Address:** See *Table 17* on page 88
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

Reports for Alarm, Cancel and Exit Error events follow Alarm report routing. See "Communication Failure (Comm Fail)" for a description of the Comm Fail event and "Dialing Attempt Tables" for dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Restoral reports are routed as shown in *Alarm Restoral Report Routing, Zone Function* ##. Trouble reports are routed globally. See *Global Reporting Options* on page 19.

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

Alarm Restoral Report Routing, Zone Function ##

- **Address:** See *Table 17* on page 88
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

Alarm reports are routed as shown in *Alarm Report Routing.* Trouble reports are routed globally. See *Global Reporting Options* on page 19.

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

4.5.3 Global Zone Configuration

On-board Location EOL Resistor Value

- **Address:** 1026
- **Default:** 5 (Tamper-wired loops, single tamper-wired sensors)
- **Selections:**
  - 0 = No EOL Resistor
  - 1 = 1 k EOL Resistor
  - 2 = 2.2 k EOL Resistor
  - 3 = 3.65 k EOL Resistor
  - 4 = Zone Doubled, 2.2 k & 3.65 k EOL Resistors
  - 5 = Tamper-wired loops, single tamper-wired sensors
  - 6 = Tamper-wired loops, multiple tamper-wired sensors (up to 5 max)

This parameter applies to the control panel's eight on-board sensor loops.

If zone doubling is turned on, the locations are paired as shown in *Table 23*.

Table 23: EOL Resistor Location Pairing for Zone Doubling

	Location (Sensor Loop)							
EOL Resistor	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
3.65 k	1	2	3	4	5	6	7	8
2.2 k	9	10	11	12	13	14	15	16

Zone Response Options (for all zones)

- **Address:** 1027
- **Default:** 0
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
Zone Response Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Enable Smart Swinger		•		•												
Unverified Events Send Trouble Reports			•	•												
Reserved																
Reserved																

- **Smart Swinger:** If enabled, this option allows zones that were Swinger Shunted to report new alarm events if they are faulted when Bell Time is running. The ARC receives alarm reports from zones that previously reported as Swinger Shunted. When Bell Time is running, the Swinger Count applies to these zones. They only send reports until Bell Time expires or until the swinger count is reached again at which time they Swinger Shunt again. If these bypassed zones are faulted when Bell Time is not running, they remain Swinger Shunted and do not send reports.
- **Unverified Events Send Trouble Reports:** If this option is enabled, Fire Alarm with Verification zones that have single, unverified events generate an Unverified Event report. Zones with the Cross Zone option enabled that have a single pulse generate an Unverified Event report.

Bypass/Force Arm Report Routing

- **Address:** 1028
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

This parameter sets the routing for Bypass and Forced reports. See "Communication Failure (Comm Fail)" for a description of the Comm Fail event and "Dialing Attempt Tables" for dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

Swinger Count for Alarm Output

- **Address:** 1029
- **Default:** 3
- **Selections:**
  - 0 (Swinger disabled)
  - 1 to 15

Each individual zone has a swinger count for alarm output.

Swinger Shunt reports are not sent for Swinger Shunt for Alarm Output. Zone reports have their own swinger count (see *Swinger Count for Zone Reports* on page 105). The Swinger Count is reset on both arming and disarming of the system, allowing Swinger Shunt to work for both non-24-hour and 24-hour zones. A trouble condition occurs after Swinger Shunt.

Example: Assume the Swinger Shunt option is enabled, the control panel is armed, no zones are in alarm and the Swinger Count for Alarm Output is set to 2. Zones 1, 3 and 5 go into alarm. At the end of Bell Time, the Swinger Count for Alarm Output for Zones 1,3 and 5 decrements from 2 to 1. Since the counter does not reach zero, no zones are bypassed. A second alarm event for any of those zones bypasses that zone.

When the Swinger Count is set to zero (0), Swinger Count for Alarm Outputs is disabled. The alarm outputs activate on every new alarm.

Swinger Count for Zone Reports

- **Address:** 1030
- **Default:** 3
- **Selections:**
  - 0 (Swinger disabled)
  - 1 to 15

This parameter sets the swinger count for zone alarm, trouble, and restoral reports.

Swinger shut down for the dialer is a global function that affects all zones.

Swinger Shunt {33} reports are sent for Swinger Shunt of zones.

The Swinger Count is reset on both arming and disarming, allowing the Swinger Shunt feature to work for both non-24-hour and 24-hour zones.

Example: Assume the Swinger Shunt option is enabled, the control panel is armed and there are no alarms. When the zone sends an Alarm or Trouble event to the dialer, the swinger count for zone reports is checked. If the counter is at zero, the zone is already Swinger Shunted and no report is sent. If the counter is not at zero, the control panel decrements the counter. If the counter then goes to zero after the report is sent, the Swinger Shunt {33} report is sent. The zone is then swinger shunted.

If the swinger count is set to zero (0), the Swinger Count for Zone Reports feature is disabled. The dialer sends all alarm or trouble events.

Bypass/Swinger Shunt/Trouble Report Options

- **Address:** 1031
- **Default:** 3
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Bypass, Swinger Shunt, Sensor Trouble Report Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Zone Bypass and Swinger Shunt Reports Enabled		•		•		•		•		•		•		•		•
Bypass and Swinger Shunt Restoral Reports Enabled			•	•			•	•			•	•			•	•
Sensor Trouble Reports Enabled					•	•	•	•					•	•	•	•
Sensor Trouble Restoral Reports Enabled									•	•	•	•	•	•	•	•

This is a global parameter that affects all areas. This parameter enables Zone Bypass, Swinger Shunt and Sensor reports (and their respective restoral reports are enabled).

Sensor Monitor Time

- **Address:** 1032, 1033
- **Default:** 0,7
- **Selections:** 0 to 9

This parameter determines the number of days (00 to 99) that the control panel can function without sensor (zone) activity (time accumulates only when the area is off/disarmed).

Assign this parameter by zone function in *Options 1, Zone Function* ## (see page 95). This parameter does not apply to fire zone types or non-fire 24-hour zone types.

If there is no sensor activity after the entered time period, a trouble report is sent.

Alarm Event Abort Window

- **Address:** 1034
- **Default:** 3 (45 sec)
- **Selections:**
  - 0 to 1 = 15 sec
  - 2 = 30 sec
  - 3 to 15 = 45 sec

This parameter sets the length of time that a user has to enter a valid PIN and cancel an alarm before an alarm report is sent.

If a user acknowledges a non-fire alarm event by entering their PIN before the Alarm Event Abort Window expires, the following events occur:

1. The alarm event is aborted. Alarm, Cancel and Restoral reports associated with the alarm are not transmitted. The alarm event becomes a local only event.
2. The user hears a unique three long beep tone at the keypad.
3. The text keypad indicates the aborted alarm on the display. The LED keypad indicates the aborted alarm with a slow flash in Alarm Memory.

See *Cancel Event Enabled* on page 26 and the "Enable Alarm Event Abort" option in *Options 1 for Zone Function Types 0 to 2, 5 to 8, 11 to 15* on page 95 for more information.

This parameter only affects non-fire zones. Fire and Fire with Verification zones are not affected by enabling this parameter.

Zone Trouble/Restoral from Trouble Report Routing

- **Address:** 1038
- **Default:** 1 (Reports to Destination 1, Events to Log/Printer)
- **Selections:**
  - 0 = No Reports, no Events to Log/Printer
  - 1 = Reports to Destination 1, Events to Log/Printer
  - 2 = Reports to Destination 2, Events to Log/Printer
  - 3 = Reports to Destinations 1 & 2, Events to Log/Printer
  - 4 = Reports to Destination 2 only on Destination 1 Comm Fail Event, Events to Log/Printer
  - 5 = No reports, Events to Log/Printer

Zone Trouble report events include the following:

- RF Low Battery {121}
- RF Tamper Trouble {121}
- Trouble Events {139 to 145}

Restoral from Trouble report events include Restoral from Trouble events {146 – 152}.

See "Communication Failure (Comm Fail)" for a description of the Comm Fail event and "Dialing Attempt Tables" for dialing sequence in the *DS7200V2 Installer's Guide* (P/N: 4998153893).

Enable reporting at the Global Reporting Options parameter (see *Global Reporting Options* on page 19), and enter at least one phone number (or IP address) for one routing destination (see *Phone Number 1 (2) for Destination 1 (2)* on page 9).

4.6 Output Parameters

4.6.1 Global Output Configuration

The DS7240V2 supports up to 20 outputs: four on-board Programmable Outputs (PO 1 to PO 4), and up to 16 off-board using two DX3010 Output Expanders. The DS7220V2 supports up to 12 outputs: four on-board Programmable Outputs (PO 1 to PO 4), and up to 8 off-board using one DX3010 Output Expander.

Outputs 5 through 12 are on an off-board Data Bus device (DX3010 Output Expander or DX3020 X-10 Interface Module) at Data Bus Address 150.

Outputs 13 through 20 (DS7240V2 only) are on an off-board Data Bus device (DX3010 Output Expander or DX3020 X-10 Control Module) at Data Bus Address 151.

Global Output Options

- **Address:** 1039
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Global Output Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Output 2 is Supervised Horn/Strobe Speaker Output		•		•		•		•		•		•		•		•
Send Output Set/Reset Reports			•	•			•	•			•	•			•	•
Enable Strobe Arming Flash to indicate RF Keyfob & Keyswitch Arm/Disarm					•	•	•	•					•	•	•	•
Enable Alarm Output Arming Beep to indicate RF Keyfob & Keyswitch Arm/Disarm									•	•	•	•	•	•	•	•

- **Output 2 Is Supervised Horn/Speaker Output:** This option turns Programmable Output 2 (PO 2) into a supervised siren driver. If a siren or speaker is not connected, the control panel generates a Siren Trouble event that can include a Siren Trouble {193} report. The restoral event is reported with Siren Trouble Restore {194}. See "On-board Output Setup" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for more information. Compatible speakers include D118 and D119 Speaker Drivers.
- **Send Output Set/Reset Reports:** This option allows the control panel to send Output Set {109 to 111} and Output Reset {106 to 108} reports when outputs are operated by a user, a Sked or RPS (Remote Programming Software).
- **Enable Strobe Arming Flash to Indicate RF Keyfob and Keyswitch Arm/Disarm:** This option allows the Strobe Output Function (1|6) to indicate RF and keyswitch arming and disarming as follows:
  - 3 sec = transition to Off (disarmed)
  - 6 sec = transition to All On or Perimeter Only
- **Enable Alarm Output Arming Beep to Indicate RF Keyfob and Keyswitch Arm/Disarm:** This option allows any Alarm Output Functions (1|8, 1|9, 1|10, and 8|8) to indicate RF and Keyswitch arming and disarming as follows:
  - 1 Beep = transition to Off (disarmed)
  - 2 Beeps = transition to All On
  - 3 Beeps = transition to Perimeter Only

The "Enable Alarm Output Arming Beep to Indicate RF Keyfob and Keyswitch Arm/Disarm" option is only available for RF Keyfobs (not RF Keypads) and when arming from RPS or a keyswitch.

Bell Time

- **Address:** 1040
- **Default:** 6 (min.)
- **Selections:** 0-15 (1-minute increments)

Bell Time determines how long, 0 to 15 min., the Alarm Output, Fire Alarm Output, Silent Alarm Output, and Bell Time functions remain activated when triggered by an alarm event.

Siren Warble Frequency

- **Address:** 1041
- **Default:** 7
- **Selections:** 0 (lowest tone/frequency) to 15 (highest tone/frequency)

This parameter sets the siren warble frequency for non-fire alarm output functions.

Programmable Output 2 (PO 2) can be configured as a supervised horn/speaker output (see *Global Output Options* on page 107).

This parameter sets the warble frequency for the alarm output functions (1|8, 1|9, 1|10, and 8|8). The setting chosen here does not apply to other output functions.

Lowering the frequency effectively raises the perceived volume.

Alarm Output Arming Beep Volume

- **Address:** 1042
- **Default:** 7
- **Selections:** 0 (no sound) to 15 (loudest); 1 = quiet)

PO 2 can be configured as a supervised horn/speaker output (see *Global Output Options* on page 107).

This parameter sets the perceived volume for the Alarm Output Arming Beep.

Strobe Output Type Options

- **Address:** 1043
- **Default:** 15
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Strobe Output Type Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Bell Time Activates Strobe Output Type	•															
Alarm Output Type 1,8 Activates Strobe		•		•		•		•		•		•		•		•
Alarm Output Type 1,9 Activates Strobe			•	•			•	•			•	•			•	•
Alarm Output Type 1,10 Activates Strobe					•	•	•	•					•	•	•	•
Alarm Output Type 1,11 Activates Strobe									•	•	•	•	•	•	•	•

This parameter configures the Strobe Output Type (see Output Function Type 1,6 Strobe in *Table 25* on page 112). Choose any combination of these options to activate the strobe output type. PIN entry resets the function.

If no strobe output type is selected (0 is selected for this option), the strobe output follows Bell Time (see *Bell Time* on page 108 for more information).

- **Bell Time Activates Strobe Output Type:** The Strobe Output Type 1,6 activates when an alarm event starts Bell Time. PIN entry resets the function.
- **Alarm Output Type 1|8 Activates Strobe:** Any event that activates Alarm Output Type 1|8 also activates Strobe Output Type 1|6. PIN entry resets the function.
- **Alarm Output Type 1|9 Activates Strobe:** Any event that activates Alarm Output Type 1|9 also activates Strobe Output Type 1|6. PIN entry resets the function.
- **Alarm Output Type 1|10 Activates Strobe:** Any event that activates Alarm Output Type 1|10 also activates Strobe Output Type 1|6. PIN entry resets the function.
- **Alarm Output Type 1|11 Activates Strobe:** Any event that activates Alarm Output Type 1|11 also activates Strobe Output Type 1|6. PIN entry resets the function.

4.6.2 Output Configuration

The DS7240V2 supports up to 20 outputs: four on-board Programmable Outputs (PO 1 to PO 4), and up to 16 off-board using two DX3010 Output Expanders. The DS7220V2 supports up to 12 outputs: four on-board Programmable Outputs (PO 1 to PO 4), and up to 8 off-board using one DX3010 Output Expander.

PO 2 can be configured as a supervised speaker output (8 Ω, 10 watt). See "On-board Output Setup" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for more information.

- **PO 1 to PO 4:** On-board outputs
  - **PO 1 default:** 1|10 Alarm: Controlled and 24-Hour zones (Fire and Non-Fire)
  - **PO 2 default:** 1|6 Strobe
  - **PO 3 default:** 0|1 Armed: All, Perimeter Only, or Partial On
  - **PO 4 default:** 2|13 Ready to Arm
- **PO 5 to PO 12:** Off-board Data Bus device (DX3010 Octo-Output Expander or DX3020 X-10 Control Module) set to Address 150
  - **PO 5 to PO 12 default:** Disabled
- **PO 13 to PO 20 (DS7240V2 only):** Off-board Data Bus device (DX3010 Octo-Output Expander or DX3020 X-10 Control Module) set to Address 151
  - **PO 13 to PO 20 default:** Disabled

See *Table 24* for Output configuration parameter addresses and defaults.

Shaded cells only apply to the DS7240V2.

Table 24: Output Configuration Parameters

Output	Area	Function		Mode	Base	Multiplier	
		Digit 1	Digit 2			Digit 1	Digit 2
1	Addr 1044 **(1)**	Addr 1045 **(1)**	Addr 1046 **(10)**	Addr 1047 **(1)**	Addr 1048 **(0)**	Addr 1049 **(0)**	Addr 1050 **(0)**
2	Addr 1051 **(1)**	Addr 1052 **(1)**	Addr 1053 **(6)**	Addr 1054 **(1)**	Addr 1055 **(0)**	Addr 1056 **(0)**	Addr 1057 **(0)**
3	Addr 1058 **(1)**	Addr 1059 **(0)**	Addr 1060 **(1)**	Addr 1061 **(1)**	Addr 1062 **(0)**	Addr 1063 **(0)**	Addr 1064 **(0)**
4	Addr 1065 **(1)**	Addr 1066 **(2)**	Addr 1067 **(13)**	Addr 1068 **(1)**	Addr 1069 **(0)**	Addr 1070 **(0)**	Addr 1071 **(0)**
5	Addr 1072	Addr 1073	Addr 1074	Addr 1075	Addr 1076	Addr 1077	Addr 1078
6	Addr 1079	Addr 1080	Addr 1081	Addr 1082	Addr 1083	Addr 1084	Addr 1085
7	Addr 1086	Addr 1087	Addr 1088	Addr 1089	Addr 1090	Addr 1091	Addr 1092
8	Addr 1093	Addr 1094	Addr 1095	Addr 1096	Addr 1097	Addr 1098	Addr 1099
9	Addr 1100	Addr 1101	Addr 1102	Addr 1103	Addr 1104	Addr 1105	Addr 1106
10	Addr 1107	Addr 1108	Addr 1109	Addr 1110	Addr 1111	Addr 1112	Addr 1113
11	Addr 1114	Addr 1115	Addr 1116	Addr 1117	Addr 1118	Addr 1119	Addr 1120
12	Addr 1121	Addr 1122	Addr 1123	Addr 1124	Addr 1125	Addr 1126	Addr 1127
13	Addr 1128	Addr 1129	Addr 1130	Addr 1131	Addr 1132	Addr 1133	Addr 1134
14	Addr 1135	Addr 1136	Addr 1137	Addr 1138	Addr 1139	Addr 1140	Addr 1141
15	Addr 1142	Addr 1143	Addr 1144	Addr 1145	Addr 1146	Addr 1147	Addr 1148
16	Addr 1149	Addr 1150	Addr 1151	Addr 1152	Addr 1153	Addr 1154	Addr 1155
17	Addr 1156	Addr 1157	Addr 1158	Addr 1159	Addr 1160	Addr 1161	Addr 1162
18	Addr 1163	Addr 1164	Addr 1165	Addr 1166	Addr 1167	Addr 1168	Addr 1169
19	Addr 1170	Addr 1171	Addr 1172	Addr 1173	Addr 1174	Addr 1175	Addr 1176
20	Addr 1177	Addr 1178	Addr 1179	Addr 1180	Addr 1181	Addr 1182	Addr 1183

Area, Output ##

- **Address:** See *Table 24* on page 110
- **Default:** 1 (Assign Output to Area 1)
- **Selections:** 0-15

	Enter This Data Digit to Select Options															
Output Area Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Area Assigned (Output disabled)	•															
Assign Output to Area 1		•		•		•		•		•		•		•		•
Assign Output to Area 2			•	•			•	•			•	•			•	•
Assign Output to Area 3 (DS7240V2 only)					•	•	•	•					•	•	•	•
Assign Output to Area 4 (DS7240V2 only)									•	•	•	•	•	•	•	•

This parameter assigns an area to the output. Functions are only activated by keypads or zones assigned to the same area. Outputs can be assigned to multiple areas.

Function, Output ##

- **Address:** See *Table 24* on page 110
- **Default:**
  - **PO 1:** 1|10 Alarm: Controlled and 24-hr Zones (Fire and Non-Fire)
  - **PO 2:** 1|6 Strobe
  - **PO 3:** 0|1 Armed: All, Perimeter Only, or Partial On
  - **PO 4:** 2|13 Ready to Arm
  - **PO 5** to PO 20: 0|0 Disabled
- **Selections:** 0,0 to 8,15 (see *Table 25*)

This parameter assigns each output to a specific function. The function determines when the output activates. The Mode, Time and Multiplier parameters, in combination with this Function parameter, determine when the output deactivates.

All output functions can be reset using [#][5][4] except Alarm Outputs that follow Function Types 1|8 to 1|12 and 2|11, and those functions that can be reset by pressing [System Reset].

Table 25: Output Function Types

Digit 1	Digit 2	Function Type	Description
0	0	Disabled	
0	1	Armed – All, Perimeter Only, or Partial On	Output activates when the system is armed All On, Perimeter Only, or Partial On. For Steady or Pulse modes, the output remains activated until the system is turned off.
0	2	Armed – Perimeter Only or Partial On	Output activates when the system is armed Perimeter Only, or Partial On. For Steady or Pulse modes, the output remains activated until the system is turned off, or moved to another armed state.
0	3	Armed – All	Output activates when the system is turned All On. For Steady or Pulse modes, the output remains activated until the system is turned off, or moved to another armed state.
0	4	Auto Arm Alert	Output activates at the start of the Auto Arm Alert. For Steady or Pulse modes, the output remains activated for the duration of the alert. See *Auto On Alert Time* on page 26.
0	5	Exit Delay or Entry Delay	Output activates at the start of Exit Delay or Entry Delay. For Steady or Pulse modes, the output remains activated until entry or exit delay ends.
0	6	Exit Delay	Output activates at the start of Exit Delay. For Steady or Pulse modes, the output remains activated until exit delay ends.
0	7	Exit Delay Finished (until disarmed)	Output activates at the end of Exit Delay. For Steady or Pulse modes, the output remains activated until the system is disarmed.
0	8	Armed with Ack	For systems programmed for closing reports, the output activates when the acknowledgement for the closing report is received. For systems not sending closing reports, the output activates at the end of Exit Delay. For Steady or Pulse modes, the output remains activated until the system is disarmed.
0	9	Entry Delay	Output activates at the start of Entry Delay. For Steady or Pulse modes the output remains activated until Entry Delay ends.
0	10	Entry Delay + Chime	Output activates at the start of Entry Delay. For Steady or Pulse modes, the output remains activated until entry delay ends. The output also activates whenever a Chime zone is faulted. **The output does not activate on Chime if Chime Tone is turned off.**

Table 25: Output Function Types (continued)

Digit 1	Digit 2	Function Type	Description
0	11	Exit Delay, Entry Delay, Chime	Output activates at the start of Exit Delay or Entry Delay. For Steady or Pulse modes, the output remains activated until Entry or Exit Delay ends. The output also activates whenever a Chime zone is faulted. **The output does not activate on Chime if Chime Tone is turned off.**
0	12	Phone Line Fail	Output activates when a Phone Line Fail condition is detected. For Steady or Pulse modes, the output remains activated until the condition is cleared. **This output works independently of *Phone Line Fault Response Options* (page 18).**
0	13	Ack Received (any report)	Output activates when the acknowledgement for any report is received. For Steady or Pulse modes, [System Reset] resets. This output type is event-driven. See *Mode (Steady, Pulse, One Shot), Output* ## on page 117 for more information.
0	14	AC Fail	Output activates when a AC Fail condition is detected. For Steady or Pulse modes, the output remains activated until the condition is cleared.
0	15	Low or Missing Battery	Output activates when a control panel Low or Missing Battery condition occurs. For Steady or Pulse modes, the output remains activated until the condition is cleared.
1	0	PO 2 (on-board) Siren Supervision Fail	Output activates when a Siren Supervision Fail condition is detected. For Steady or Pulse modes, the output remains activated until the condition is cleared and the [System Reset] key is pressed.
1	1	Sensor Trouble Monitor	Output activates when a Sensor Trouble Monitor condition is detected in conjunction with the selection made for the Sensor Monitor Time setting. For Steady or Pulse modes, the output remains activated until the Sensor Monitor Trouble condition is cleared.
1	2	Duress, [#][4][7] (reset) resets	Output activates whenever a Duress PIN is entered. For Steady or Pulse modes, the output remains activated until user presses [System Reset].
1	3	User Tamper, [#][4][7] (reset) resets	Output activates on a User Tamper event. For Steady or Pulse modes, the output remains activated until user presses [System Reset].
1	4	Arming Beeps (for keyswitch/RF arming)	Disarm/All On/Perimeter Only/Partial On Beeps for keyswitch/RF arming. 1=Off, 2=All, 3=Perimeter Only. Mode and Time parameters do not apply. **This function works in conjunction with Address 1039. See *Global Output Options* on page 107. Available for on-board outputs only.**
1	5	Bell Time – Starts on any Alarm Event. PIN entry Stops. Activates on Bell Test.	Output activates on any alarm event. Entering PIN terminates Bell Time. For Steady and Pulse modes, the output remains activated for the duration programmed in the Bell Time parameter.
1	6	Strobe	Activates on Bell Time or output function as programmed. See *Strobe Output Type Options* on page 109. PIN entry resets the function.

Table 25: Output Function Types (continued)

Digit 1	Digit 2	Function Type	Description
1	7	Silent Alarm	Activated by alarm on non-fire zones programmed for No Alarm Output. Follows Bell Time for Steady and Pulse modes. PIN stops. The following conditions activate Silent Alarm: - ABC Key programmed for Fire or Emergency and no Alarm Output - RF Keyfob programmed for Fire or Emergency and no Alarm Output - A zone programmed for Fire or Fire with Verify and no Alarm Output - Any zone not programmed for Invisible Panic that is programmed for no Alarm Output - Any armed zone programmed as a controlled type that goes from Supervised to Missing and programmed for no Alarm Output - Any armed keyswitch programmed for no Alarm Output that goes from Supervised to Missing or Short to Missing - Any zone programmed for Swinger Count and Swinger Count for Alarm Output that reaches its programmed value
1	8	Alarm – All On, Perimeter Only, and Partial On Arming, Non-fire 24 hour alarms	Activated by alarm on zone when All On, Perimeter Only, and Partial On Armed, or by alarm on Non-fire 24 hour zone, and by user/installer 'Bell Test'. Follows Bell Time for Steady and Pulse modes. PIN resets. **Follows programming for 'Alarm' output types.**
1	9	Alarm – Perimeter Only and Partial On Arming Modes, Non-fire 24 hour alarms	Activated by alarm on zone when Perimeter Only, and Partial On Armed, or by alarm on Non-fire 24 hour zone, and by user/installer 'Bell Test'. Follows bell time for Steady and Pulse modes. PIN resets. **Follows programming 'Alarm' output types.**
1	10	Alarm –Controlled zones, 24-hr zones (Fire and Non-Fire)	Activated by alarm on zone when All On, Perimeter Only, and Partial On Armed, or by alarm on Fire and Non-fire 24 hour zone, and by user/installer 'Bell Test'. Follows bell time for Steady and Pulse modes. Pulses in Temporal Code 3 format for Fire alarms only. PIN resets. **Off-board outputs cannot provide output in Temporal Code 3 format (only on-board outputs). Off-board outputs provide a steady output. Follows programming for 'Alarm' output types. Temporal Code 3 for Fire alarms only.**
1	11	Fire Alarm	Activated by alarm on Fire zone, and by user/installer 'Bell Test'. Follows Bell Time. Pulses in Temporal Code 3 format. Mode and Time parameters do not apply. PIN resets. **Off-board outputs cannot provide output in Temporal Code 3 format (only on-board outputs). Off-board outputs provide a steady output. Follows programming for 'Alarm' output types.**
1	12	Fire Alarm, Latching	Activated by alarm on Fire zone, and by user/installer 'Bell Test'. Does not pulse in Temporal Code 3 format. Mode and Time parameters do not apply. [#][4][7] resets. **Follows programming for 'Alarm' output types.**
1	13	Fire Verification/Reset	Normally on. Turns off on activation to reset smoke detectors. Verification for Fire Verification Zone Function type and [System Reset] activate output for approximately 15 sec. Mode and Time parameters do not apply. Used for 4-wire smoke detectors.
1	14	System Trouble	Activates on any System Trouble. Resets when all system troubles are clear.
1	15	[O] Key (Trapezoid Key on RF Key Fob)	Activates when [O] (Trapezoid key on RF Keyfob is pressed. [System Reset] resets. Pressing [O] again also resets output when Output Mode is set to Toggle. This output type is event-driven. See *Mode (Steady, Pulse, One Shot), Output ##* on page 117 for more information.

Table 25: Output Function Types (continued)

Digit 1	Digit 2	Function Type	Description
2	0	[P] Key (Rising Sun Key on RF Fob)	Activates when [P] (Rising Sun) key on RF Keyfob is pressed. [System Reset] resets. Pressing [P] again also resets output when Output Mode is set to Toggle. This output type is event-driven. See *Mode (Steady, Pulse, One Shot), Output* ## on page 117 for more information.
2	1	'Panic' on RF Fob	Activates when Arm Key (locked icon) and Disarm Key (unlocked icon) on RF Keyfob are pressed at the same time, or when [Q] is pressed and it is set to Duress. See *[Q] Button Alarm Response Options* on page 76. [#][4][7] resets.
2	2	'Panic' on RF Fob, Bell Time, PIN resets	Activates when Arm Key (locked icon) and Disarm Key (unlocked icon) on RF Keyfob are pressed at the same time, or when [Q] is pressed and it is set to Duress. Steady and Pulse modes follow bell time. PIN resets.
2	3	[A] Key	Activates when appropriate keys are pressed. [System Reset] resets if no alarm response is assigned. These output types are event-driven. See *Mode (Steady, Pulse, One Shot), Output* ## on page 117 for more information.
2	4	[B] Key	
2	5	[C] Key	
2	6	3 Unsuccessful Dialing Attempts	Activates after 3 unsuccessful dialing attempts. Resets with first successful call or [System Reset].
2	7	Communication Fail Event	Activates after Communication Fail Event. Resets with any successful communication or [System Reset].
2	8	Panel Off Hook	Activates when the control panel takes the phone line off hook for a dialing attempt. Resets when the control panel finishes with the phone line and goes on hook.
2	9	Ring Detect	Activates when the control panel detects a ring on the phone line. Resets when ringing stops.
2	10	Voice Request	For use with an optional Voice Verification Module. The output activates for 2 sec when the control panel receives an acknowledgement of an alarm report from a zone with the Voice Verification option enabled. Mode and Time parameters do not apply.
2	11	Follow Keypad Sounder	Available for on-board outputs only. Output follows keypad sounder Mode and Time parameters do not apply.
2	12	Chime	Activates per Chime configuration. Follows keypad sounder per Chime Tone configuration.
2	13	Ready to Arm (No zones faulted)	Output is activated (on) when: (1) control panel is disarmed & no zones are faulted (2) control panel is armed & no zones are faulted (3) control panel is armed and any zone is faulted. Output is deactivated (off) when control panel is disarmed & any zone is faulted. Output is deactivated even if the zone became faulted when control panel was armed.
2	14	Exit Error/Bad Set	Activates if zone is faulted at the end of Exit Delay or if a Bad Set condition occurs. Resets when the system is disarmed.
2	15	AC 60 Hz	Activates on 60 Hz. Deactivates on 50 Hz.
3	0	Ground Start	Activates for approximately 0.5 sec at the start of any dialing attempt. Use to bring up dial tone in ground start phone systems.
3	1	Follow Zone Function 1	These 15 output functions activate for any fault on any zone assigned to the specified Zone Function.
		to	
3	15	Follow Zone Function 15	
4	0	Change Outputs	Activated/deactivated by Change Outputs function ([#][5][4]).
4	1	Alarm Zone Function 1	These 15 output functions activate for alarms on any zone assigned to the specified Zone Function and the area(s) the output is assigned to. They reset when none of the zones assigned to the specified Zone Function are in alarm.
		to	
4	15	Alarm Zone Function 15	
5	0	Change Outputs	Activated/deactivated by Change Outputs function ([#][5][4]).

Table 25: Output Function Types (continued)

Digit 1	Digit 2	Function Type	Description
5	1	Trouble Zone Function 1	These 15 output functions activate for troubles on any zone assigned to the specified Zone Function. They reset when none of the zones assigned to the specified Zone Function are in trouble.
		to	
5	15	Trouble Zone Function 15	
6	0	Change Outputs	Activated/deactivated by Change Outputs function ([#][5][4]).
6	1	Follow PIN 1	These output functions activate when the specified PIN is entered. Output Function Type 7, 12 follows User 28, which can be programmed as the Guard Code User (see page 74). These output types are event-driven. See *Mode (Steady, Pulse, One Shot), Output* ## on page 117 for more information. **PIN area assignments are ignored when these output functions are selected.**
		to	
6	15	Follow PIN 15	
7	0	Follow PIN 16	
		to	
7	15	Follow PIN 31	
8	0	Follow PIN 32	
8	1	Sked Only	This output type is only available for Outputs 1 to 15. Activated by Skeds. See *Assign (Area or Output), Sked* # on page 121 for more information.
8	2	Change Outputs	Activated/deactivated by Change Outputs function ([#][5][4]).
8	3	Always On	Output is always activated.
8	4	Verified Alarm	Activates when the requirements for a verified alarm are met. Resets when a PIN is entered.
8	5	Unverified Alarm	Activates on any non-24-hr alarm, 24-hr tamper or 24-hr burglary alarm. Resets when the verified alarm timer resets or when a PIN is entered.
8	6	Tamper	Activates on any tamper condition. Resets when the tamper condition restores.
8	7	Bypass	Activates when any input is bypassed. Resets when all input bypasses are cleared.
8	8	Enhanced Siren	Activates on Exit Delay, Entry Delay, Chime, Alarm, Tamper, Trouble, or Bad Set. Resets at the end of bell time or when a PIN is entered.
8	9	Alarm Cancel	Activates on a cancelled alarm. Resets when alarm is cleared.
8	10	RF Transmitter Missing	Activates when any RF transmitter is missing. Restores by pressing the [System Reset] key.
8	11	RF Transmitter Low Battery	Activates when any RF transmitter is reporting a low battery. Resets by pressing the [System Reset] key.
8	12	RF Receiver Jamming	Activates when RF Jamming is present. Resets by pressing the [System Reset] key.
8	13	Fire Alarm Only	Activates on Fire Alarm only. PIN resets. Does not pulse in Temporal Code 3 format.
8	14	Personal Alarm	Activates when one of its assigned areas is set to Personal Alarm. Resets by entering a valid user PIN, pressing [System Reset], or by RPS (System Reset command). Activates on any of the following conditions: (1) If a Duress User PIN is entered (2) If an Emergency key is active in an area and “Activate Panic Alarm Response” and “Alarm Output” are enabled for the key (3) If a RF keyfob reports a Panic alarm (4) If a zone configured for 24-hr Visible Panic (Zone Function Type 6) goes into alarm, or (5) Certain [Q] button configurations. See *Q Button Configuration* on page 76.
8	15	[Q] Button	Output activates when [Q] is pressed on a RF keyfob. For Steady or Pulse modes, [System Reset] resets. This output function type is event-driven. See *Mode (Steady, Pulse, One Shot), Output* ## on page 117 for more information.

Mode (Steady, Pulse, One Shot), Output ##

- **Address:** See *Table 24* on page 110
- **Default:**
  - **Outputs 1 to 4:** 1 (Steady)
  - **Outputs 5 to 20:** 0 (Disabled)
- **Selections:** 1 to 13 (see *Table 26*)

There are two types of outputs: state-driven outputs and event-driven outputs. **State-driven outputs** follow the state of a condition, either on or off. For example, a state-driven output is Type 0|1 Armed. The output is active when the control panel is armed and inactive when the control panel is disarmed.

Event-driven outputs follow events when they occur. These events have no On or Off state. For example, an event-driven output is Type 0|13 Ack Received. When the key is pressed, the output is activated.

Table 26 describes the mode operation for both on-board and off-board outputs.

Table 26: Output Mode Options

Mode	Mode Type	Output Type	Description
1	Steady	State	Output turns on when the condition is active and turns off when the condition is inactive.
		Event	Output turns on when the event occurs. [System Reset] turns the output off.
2	Latch	State	Output turns on when the condition is active and remains on until [System Reset] is pressed.
		Event	Output turns on when the event occurs and remains on until [System Reset] is pressed.
3	Toggle	State	When the condition goes from inactive to active, the output changes state. The condition going from active to inactive has no effect.
		Event	Whenever the event occurs, the output changes state.
4	Pulse	State	When the condition is active, the output pulses. When the condition is inactive, the output is off.
		Event	When the event occurs, the output pulses. The output remains pulsing until [System Reset] is pressed.
5	One-Shot	State	When the condition changes from inactive to active, the output turns on. The output turns off at the end of the One-Shot time. While the output is on, any changes in the condition are ignored.
		Event	When the event occurs, the output turns on and remains on for the One-Shot time. When the output is on, a second event does not affect the output.
6	One-Shot with Re-Trigger	State	When the condition changes from inactive to active, the output turns on and remains on for the One-Shot time. If the condition goes inactive and active again, the One-Shot time is restarted and the output remains on.
		Event	When the event occurs, the output turns on and remains on for the One-Shot time. If a new event occurs when the output is on, the One-Shot time is restarted and the output remains on.
7	One-Shot with Reset	State	When the condition changes from inactive to active, the output turns on and remains on for the One-Shot time. If the condition goes inactive, the output is turned off early.
		Event	When the event occurs, the output turns on and remains on for the One-Shot time. [System Reset] turns the output off early.
8	Steady, Reversed Logic Normal	State	Output turns on when the condition is inactive and turns off when the condition is active.
		Event	Output turns off when the event occurs. [System Reset] turns the output on.

Table 26: Output Mode Options (continued)

Mode	Mode Type	Output Type	Description
9	Latch, Reversed Logic Normal	State	Output turns off when the condition is active and remains off until [System Reset] is pressed.
		Event	Output turns off when the event occurs and remains off until [System Reset] is pressed.
10	Pulse, Reversed Logic Normal	State	When the condition is active, the output pulses. When the condition is inactive, the output is on.
		Event	When the event occurs, the output pulses. The output continues pulsing until [System Reset] is pressed, then turns on.
11	One-Shot, Reversed Logic Normal	State	When the condition changes from inactive to active, the output turns off. The output turns on at the end of the One-Shot time. While the output is off, any changes in the condition are ignored.
		Event	When the event occurs, the output turns off and remains off for the One-Shot time. While the output is off, a second event does not affect the output.
12	One-Shot with Re-Trigger, Reversed Logic Normal	State	When the condition changes from inactive to active, the output turns off and remains off for the One-Shot time. If the condition goes inactive and active again, the One-Shot time is restarted and the output remains off.
		Event	When the event occurs, the output turns off and remains off for the One-Shot time. If a new event occurs, the One-Shot time is restarted and the output remains off.
13	One-Shot with Reset, Reversed Logic Normal	State	When the condition changes from inactive to active, the output turns off and remains off for the One-Shot time. If the condition goes inactive, the output is turned on early.
		Event	When the event occurs, the output turns off and remains off for the One-Shot time. [System Reset] turns the output on early.

Base, Output ##

- **Address:** See *Table 24* on page 110
- **Default:** 0 (Disabled)
- **Selections:**
  - 0 = Disabled
  - 1 = 200 ms (on-board outputs only)
  - 2 = 1 second
  - 3 = 1 minute
  - 4 = 1 hour

Multiply the Base with the Multiplier to determine the output's timing. See *Table 27*, on page 119, and *Table 28*, on page 119.

Multiplier, Output ##

- **Address:** See *Table 24* on page 110
- **Default:** 0,0 (Disabled)
- **Selections:** 0,0 to 9,9

Multiply the Base with the Multiplier to determine the output's timing. See *Table 27*, on page 119, and *Table 28*, on page 119.

Steady, Pulse, and One-Shot Mode Configuration

- **Steady and Toggle Modes:** These modes are not affected by the Time Base and Time Multiplier parameters below.
- **Pulse Modes:** The system calculates the On Time (activation) and the Off Time for outputs based on the values in the Base and Multiplier columns (see *Table 27*). The duration, or On Time, of an output is determined by selecting one of the four Base options from *Table 27*. Calculate the Off Time by multiplying the Base by the Multiplier.

The Time Base of 200 ms in *Table 27* and *Table 28* is only available for on-board outputs.

Table 27: Pulse Mode Configuration

Base	On Time (On Time = Time of Base)	Multiplier	Off Time (Off Time = Base x Multiplier)	Tolerance
0	0	N/A	Always Off	N/A
1 (200 ms)	200 ms	01 to 99	200 ms to 19.8 sec	±200 ms
2 (1 sec)	1 second	01 to 99	1 to 99 sec	±1 second
3 (1 min)	1 minute	01 to 99	1 to 99 min.	±1 minute
4 (1 hr)	1 h	01 to 99	1 to 99 h	±1 h

- **One Shot Modes:** The duration of the On Time of a One Shot output is determined by multiplying the Base by the Multiplier.

Table 28: One Shot Mode Configuration

Base	Multiplier	On Time (On Time = Base x Multiplier)	Tolerance
0	N/A	0	N/A
1 (200 ms)	01 to 99	200 ms to 19.8 sec	±200 ms
2 (1 sec)	01 to 99	1 to 99 sec	±1 second
3 (1 min)	01 to 99	1 to 99 min.	±1 minute
4 (1 hr)	01 to 99	1 to 99 h	±1 h

4.7 Sked Parameters

Skeds are programmable events that occur at a specified time of day and day of the week.

Users can extend Auto On, Auto Perimeter Only On and Auto Partial On time by one h using the Extend Auto On Time function ([#][5][1]). When [#][5][1] is entered, the control panel sends an Auto On Extended {21} report.

Users can also change Skeds using the Change Skeds function ([#][5][2]). A Sked must first be entered before the Change Skeds function is used.

The following sections and parameters detail the programming of each of the eight Skeds. The parameters in *Output Parameters* on page 107 determine the characteristics of the output activation that occurs at the Sked time.

See *Table 29* for Sked configuration parameter addresses.

The default setting for all Sked parameters is 0 (zero).

Table 29: Sked Configuration Parameters

Sked	Type	Assign (Area or Output)	Time				Days 1 Option	Days 2 Option
			(H _ _ _)	(_H _ _)	(_ _ M _)	(_ _ _ M)		
1	Addr 1184	Addr 1185	Addr 1186	Addr 1187	Addr 1188	Addr 1189	Addr 1190	Addr 1191
2	Addr 1192	Addr 1193	Addr 1194	Addr 1195	Addr 1196	Addr 1197	Addr 1198	Addr 1199
3	Addr 1200	Addr 1201	Addr 1202	Addr 1203	Addr 1204	Addr 1205	Addr 1206	Addr 1207
4	Addr 1208	Addr 1209	Addr 1210	Addr 1211	Addr 1212	Addr 1213	Addr 1214	Addr 1215
5	Addr 1216	Addr 1217	Addr 1218	Addr 1219	Addr 1220	Addr 1221	Addr 1222	Addr 1223
6	Addr 1224	Addr 1225	Addr 1226	Addr 1227	Addr 1228	Addr 1229	Addr 1230	Addr 1231
7	Addr 1232	Addr 1233	Addr 1234	Addr 1235	Addr 1236	Addr 1237	Addr 1238	Addr 1239
8	Addr 1240	Addr 1241	Addr 1242	Addr 1243	Addr 1244	Addr 1245	Addr 1246	Addr 1247

Type, Sked #

- **Address:** See *Table 29*
- **Default:** 0 (No type assigned)
- **Selections:**
  - 0 = No Type Assigned (Sked disabled)
  - 1 = Auto All On
  - 2 = Auto Perimeter Only On
  - 3 = Auto Partial On
  - 4 = Auto Off
  - 5 = Output On (DS7240V2: Outputs 1 to 15; DS7220V2: Outputs 1 to 12)
  - 6 = Output Off (DS7240V2: Outputs 1 to 15; DS7220V2: Outputs 1 to 12)

The Sked Types "Output Function On" and "Output Function Off" override any output function at Sked time (except for Alarm Output Functions 1|8 to 1|12). For example, an output function that turns a light on is overridden by a Sked that turns the same light on.

Assign (Area or Output), Sked #

- **Address:** See *Table 29* on page 120
- **Default:** 0 (No Area or Output Assigned)
- **Selections:**
  - 0 = No Area or Output Assigned (Sked disabled)
  - 1 = Area 1 or Output 1
  - 2 = Area 2 or Output 2
  - 3 = Area 3 (DS7240V2 only) or Output 3
  - 4 = Area 4 (DS7240V2 only) or Output 4
  - 5 = Output 5
  - 6 = Output 6
  - 7 = Output 7
  - 8 = Output 8
  - 9 = Output 9
  - 10 = Output 10
  - 11 = Output 11
  - 12 = Output 12
  - 13 = Output 13 (DS7240V2 only)
  - 14 = Output 14 (DS7240V2 only)
  - 15 = Output 15 (DS7240V2 only)

Enter a zero (0) in this parameter to disable the Sked.

If the Sked Type is Auto On or Auto Off, this parameter assigns an Area to the Sked.

If the Sked Type is Output On or Output Off, this parameter assigns a programmable output. How the programmable output functions at Sked time is determined in *Output Parameters* on page 107.

The output assigned to the Sked in this parameter can be any output. The Sked overrides that function at Sked Time.

The Output On/Off Sked function is only available for Outputs 1 to 15 on the DS7240V2. On the DS7220V2, it is only available for Outputs 1 to 12.

Time, Sked #

- **Address:** See *Table 29* on page 120
- **Default:** 0000 (Sked disabled)
- **Selections:** 0 to 9

Enter the start time for the Sked. There are four digits in this entry, each one occupying an address.

Enter the time in 24-hour format (HHMM) where Midnight is 2400, noon is 1200 and 12:01 am is 0001.

Enter 0000 to disable the Sked.

Days Option 1, Sked #

- **Address:** See *Table 29* on page 120
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Sked Days 1 Option	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Option Selected	•															
Every Day		•		•		•		•		•		•		•		•
Monday			•				•				•				•	
Tuesday					•		•						•		•	
Wednesday									•		•		•		•	

This parameter assigns the day of the week the Sked occurs.

Entering zero (0) for this parameter disables the Sked if no selection is made in the *Days Option 2, Sked #* parameter.

If the "Every Day" option is selected in the *Days Option 1, Sked #* parameter, it overrides any selection made in the *Days Option 2, Sked #* parameter.

Days Option 2, Sked #

- **Address:** See *Table 29*
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
Sked Days 2 Option	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Option Selected	•															
Thursday		•		•		•		•		•		•		•		•
Friday			•	•			•	•			•	•			•	•
Saturday					•	•	•	•					•	•	•	•
Sunday									•	•	•	•	•	•	•	•

This parameter assigns the day of the week the Sked occurs.

Entering zero (0) for this parameter disables the Sked if no selection is made in the *Days Option 1, Sked #* parameter.

If the "Every Day" option is selected in the *Days Option 1, Sked #* parameter, it overrides any selection made in the *Days Option 2, Sked #* parameter.

4.8 Data Bus Device Parameters

The following parameters configure devices that connect to the control panel's Data Bus.

4.8.1 RF Receiver Configuration

RF Receiver Options

- **Address:** 1249
- **Default:** 0
- **Selections:** 0 to 7

	Enter This Data Digit to Select Options															
Premises RF Receiver Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No RF Receiver Connected	•															
RF Receiver 1 connected, set to Address 50		•		•		•		•		•		•		•		•
RF Receiver 2 connected, set to Address 51			•	•			•	•			•	•			•	•
Disable RF Loop Tamper					•	•	•	•					•	•	•	•
Keyfobs Do Not Force Arm Faulted Zones									•	•	•	•	•	•	•	•

- **RF Receiver 1 Connected, Set Receiver to Address 50:** Enable this option if RF Receiver 1 has been connected to the control panel. Set the RF receiver's address to 50 (jumper setting OFF). See "Adding RF ID Codes" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for instructions. See *RF Transmitters and Zone States* on page 87 for details on RF transmitters and zone states.

  All status reports for the RF Receiver include the address. For example, if the cover is removed, Event {127} (DBus Tamper) is generated.

- **RF Receiver 2 Connected, Set Receiver to Address 51:** Enable this option if RF Receiver 2 has been connected to the control panel. Set the RF receiver's address to 51 (jumper setting ON). See "Adding RF ID Codes" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for instructions. See *RF Transmitters and Zone States* on page 87 for details on RF transmitters and zone states.

  All status reports for the RF Receiver include the address. For example, if the cover is removed, Event {127} (DBus Tamper) is generated (the address is included in the report).

- **Disable RF Loop Tamper:** The RF3401E transmitter's loop can be wired with a single 2.2 k EOL resistor, or it can be wired with dual 2.2 k EOL resistors. If this option is enabled, wire the RF3401E with a single 2.2 k EOL resistor. The loop can report as normal, shorted, or open. If this option is disabled, wire the RF3401E is with dual 2.2 k EOL resistors. The loop can report as normal, shorted, faulted, or open.

- **Keyfobs Do Not Force Arm Faulted Zones:** If this option is enabled, arming from a keyfob does not force arm faulted zones. A faulted zone prevents the area from arming. If this option is disabled, arming from a keyfob does force arm faulted zones.

RF Receiver Supervision Interval

- **Address:** 1250
- **Default:** 5 (24 h)
- **Selections:**
  - 0 = No Supervision
  - 1 = 1 h
  - 2 = 2 h
  - 3 = 4 h
  - 4 = 12 h
  - 5 = 24 h

RF transmitters (sensors) send a supervisory signal approximately once every 13 min.. The RF receiver expects to hear this signal from every transmitter in the interval determined in this parameter. A "Missing" report is sent for each device that the RF Receiver does not hear.

Fire transmitters have a fixed supervision interval of 4 h.

RF Jam Detect Level

- **Address:** 1251
- **Default:** 12
- **Selections:** 0-15

This parameter configures the RF receivers for jam detection.

Leave the RF Jam Detect Level parameter at the default setting unless advised by Bosch Technical Service.

4.8.2 RS-232 Module Configuration

The following parameters apply to the DX4010i and DX4010 RS-232 Serial Interface Modules.

Output Configuration Options

- **Address:** 1253
- **Default:** 0 (Disabled)
- **Selections:**
  - 0 = Disabled(no RS-232 module connected)
  - 1 = RS-232 Log Output using Internal Codes
  - 2 = RS-232 Log Output using PC Compatible Codes

Set the RS-232 module to Data Bus Address 250. See "DX4010i/DX4010 Addressing" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for information.

This parameter only applies when the RS-232 module is used for RS-232 serial output. It does not apply if the DX4010 is used for direct-connect remote programming.

- **RS-232 Log Output using Internal Codes:** If enabled, this option outputs the events using the internal keypad character codes. Non-standard characters may not print correctly.
- **RS-232 Log Output using PC Compatible Codes:** If enabled, this option outputs the events using PC compatible character codes. Non-standard characters are mapped to the closest matching character for display or printing.

If you connect a printer to the RS-232 module and get unexpected results, check the module output configuration (Address 1253), baud rate configuration (Address 1254) and parity/flow control/stop bit configuration (Address 1255) for proper settings.

Baud Rate Options

- **Address:** 1254
- **Default:** 2 (2400 bps)
- **Selections:**
  - 1 = 1200 bps
  - 2 = 2400 bps
  - 3 = 4800 bps
  - 4 = 9600 bps
  - 5 = 14400 bps

This parameter identifies which baud rate the RS-232 module should use for communication.

If you connect a printer to the RS-232 module and get unexpected results, check the module output configuration (Address 1253), baud rate configuration (Address 1254) and parity/flow control/stop bit configuration (Address 1255) for proper settings.

Parity, Flow Control, Stop Bit Configuration

- **Address:** 1255
- **Default:** 0
- **Selections:** 0 to 7

Selection	Parity			Flow Control		Stop Bits	
	None	Odd	Even	Software	Hardware	1	2
0	X			X		X	
1	X				X	X	
2	X			X			X
3	X				X		X
4		X		X		X	
5		X			X	X	
6			X	X		X	
7			X		X	X	

4.8.3 DX8010 Telephone Module Configuration

DX8010 Access Options

- **Address:** 1256
- **Default:** 0
- **Selections:** 0 to 15

	Enter This Data Digit to Select Options															
DX8010 Access Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Disabled, No DX8010 Connected	•															
Access Granted to Users with Authority Level 1		•		•		•		•		•		•		•		•
Access Granted to Users with Authority Level 2			•	•			•	•			•	•			•	•
Access Granted to Users with Authority Level 3					•	•	•	•					•	•	•	•
Access Granted to Users with Authority Level 4									•	•	•	•	•	•	•	•

Set this parameter to zero (0) if there are no DX8010 modules connected to the control panel, or to disable any DX8010 modules that are connected to the control panel.

Selecting any of the other options allows system control for users assigned to the chosen authority level.

4.8.4 DX2010 Configuration

DX2010 Configuration Options

- **Address:**
  - 1257 = DX2010 Address 101
  - 1258 = DX2010 Address 102
  - 1259 = DX2010 Address 103
  - 1260 = DX2010 Address 104 (DS7240V2 only)
  - 1261 = DX2010 Address 105 (DS7240V2 only)
- **Default:** 0
- **Selections:** 0 to 11

	Enter This Data Digit to Select Options															
DX2010 Configuration Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
300 ms Debounce Time	•				•				•							
150 ms Debounce Time		•				•				•						
75 ms Debounce Time			•				•				•					
30 ms Debounce Time				•				•				•				
Tamper-wired EOL Resistors	•	•	•	•												
Single 2.2 k EOL Resistor					•	•	•	•								
Single 2.2 k EOL Resistor, 30% Zone									•	•	•	•				
Reserved																

When the location's device parameter is set to 2 (see *Location ##, Device* on page 83), the sensor loop is taken from a DX2010 module. This parameter configures the input modules. The debounce time selects how quickly the input reacts to a change.

The single 2.2 k EOL resistor configurations use only one EOL resistor. The tamper-wired EOL resistor configuration uses two-2.2 k EOL resistors and can report tamper as well as alarm.

The 30% zone causes an alarm whenever the EOL resistance changes by more than 30%. This setting makes the zone more sensitive to false alarms than a standard zone. The 30% zone should only be used if required by local regulations.

4.9 Miscellaneous Programming Options

System Trouble Options

- **Address:** 1265
- **Default:** 0
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
System Trouble Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Options Selected	•															
Enable AC Fail Trouble Tone		•		•												
Enable Ground Fault Display and Trouble Tone			•	•												
Reserved																
Reserved																

- **Enable AC Fail Trouble Tone:** This option enables the AC Fail Trouble Tone. All keypads sound the trouble tone when an AC Fail condition occurs. This tone must be silenced from each area.
- **Enable Ground Fault Display and Trouble Tone:** This option enables the Ground Fault display on the LCD keypad and the accompanying trouble tone (both LCD and LED keypads). All LCD keypads display a Ground Fault message and all keypads sound a trouble tone when a Ground Fault condition occurs. The display and tone must be cleared from each area.

If Ground Fault reports are disabled and the Ground Fault Display & Trouble Tone parameter is disabled, then ground fault events are not logged.

Factory Default

- **Address:** 2944
- **Default:** 0 (Maintain user-specified changes)
- **Selections:**
  - 0 = Maintain user-specified changes
  - 1 = Return all parameters to factory default settings

This parameter restores all of the manufacturer's default settings for all parameters (including this one) when a "1" is entered.

4.10 Network Communication

Firmware revision 2.10 or greater is required for network communication.

The control panel can be configured to communicate over an Ethernet network. Reports can be sent over this network from the control panel to the ARC receiver. Remote programming can also be conducted over this network. A DX4020 Network Interface Module (NIM) is required for network communication. See "Network Interface Module (DX4020)" in the *DS7200V2 Installer's Guide* (P/N: 4998153893) for installation/configuration instructions.

Use the following steps to configure the control panel for network communication:

1. Enter an IP address for the ARC receiver [refer to *IP Address 1 (2) for Destination 1 (2)*].
2. If necessary, enter a port number for the ARC receiver's IP address (refer to page 130).
3. Set the Alternate Communication Options parameter to "5" (refer to page 132).
4. Set the Network Interface Module Options parameter to "3" (refer to page 135).

IP Address 1 (2) for Destination 1 (2)

- **Address:**
  - **IP Address 1, Destination 1:** 0000 to 0031
  - **IP Address 2, Destination 1:** 0032 to 0063
  - **IP Address 1, Destination 2:** 0066 to 0097
  - **IP Address 2, Destination 2:** 0098 to 0129
- **Default:** All zeroes (0)
- **Selections:** 000.000.000.000 to 255.255.255.255

Each routing destination can be configured as a phone number or an IP address for network communication. When entering an IP address, only the first 12 digits are used. For example, to enter an IP address of 172.30.1.101 into the Phone 1, Destination 1 addresses, enter the following digits in the first 12 addresses: 1, 7, 2, 0, 3, 0, 0, 0, 1, 1, 0, 1.

See *Table 30* for entry selections.

Table 30: IP Address Entry Selections

Digit	Enter at Keypad		Digit	Enter at Keypad
1	[1]		6	[6]
2	[2]		7	[7]
3	[3]		8	[8]
4	[4]		9	[9]
5	[5]		0	[0] or [1][0]

Port Number for IP Address 1 (2) for Destination 1 (2)

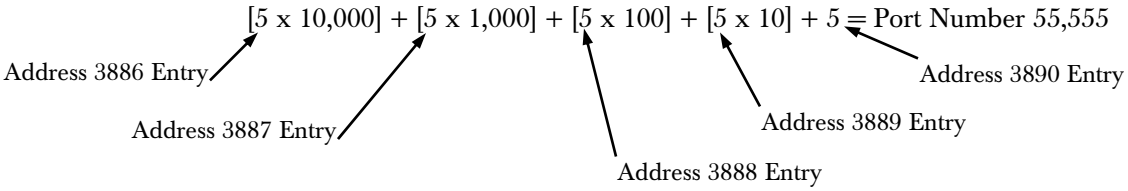
- **Address:**
  - **Port Number for IP Address 1, Destination 1:** 3886 to 3890
  - **Port Number for IP Address 2, Destination 1:** 3891 to 3895
  - **Port Number for IP Address 1, Destination 2:** 3896 to 3900
  - **Port Number for IP Address 2, Destination 2:** 3901 to 3905
- **Default:** 07700
- **Selections:** 0 to 65,535

Use the addresses listed above to associate the ARC's IP address to a specific port number for network communication.

This parameter uses five addresses for each routing destination to enter the port number:

- **First Address:** Enter the 10,000's value (this value is multiplied by 10,000)
- **Second Address:** Enter the 1,000's value (this value is multiplied by 1,000)
- **Third Address:** Enter the 100's value (this value is multiplied by 100)
- **Fourth Address:** Enter the 10's value (this value is multiplied by 100)
- **Fifth Address:** Enter the 1's value (this value is added to the other values)

The following example shows how to enter *55555* as the port number for IP Address 1, Destination 1:



Remote Programming Callback Number

- **Address:** 0181 to 0212
- **Default:** All zeroes (0)
- **Selections:** 000.000.000.000 to 255.255.255.255 (see *Table 30* on page 129)

An IP address can be used to begin a remote programming session. See *IP Address 1 (2) for Destination 1 (2)* to enter an IP address. See *Remote Programming Call Back Number* on page 16 for more information.

Port Number for Remote Programming Callback

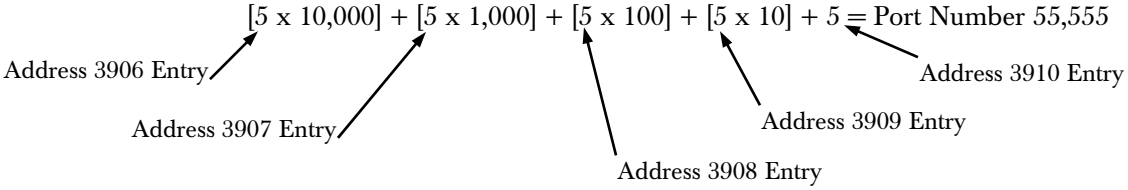
- **Address:** 3906 to 3910
- **Default:** 07700
- **Selections:** 0 to 65,535

Program the above addresses to identify the remote programming computer's port number to the control panel. This applies when the control panel begins an RPS session or calls the RPS computer back.

This parameter uses five addresses to enter the port number:

- **First Address:** Enter the 10,000's value (this value is multiplied by 10,000)
- **Second Address:** Enter the 1,000's value (this value is multiplied by 1,000)
- **Third Address:** Enter the 100's value (this value is multiplied by 100)
- **Fourth Address:** Enter the 10's value (this value is multiplied by 100)
- **Fifth Address:** Enter the 1's value (this value is added to the other values)

The following example shows how to enter 55555 as the port number for Remote Programming Callback:



Format for Destination 1 (2)

- **Address:**
  Format for Destination 1: 0064
  Format for Destination 2: 0130
- **Default:** 2 (Contact ID)
- **Selections:**
  2 = Contact ID
  3 = SIA 300
  4 = Basic Pager
  6 = BSIA Fast Format
  7 = Personal Dialing Format
  11 = SIA 300 with Text Blocks

If network communication is enabled, the control panel automatically selects Contact ID as the reporting format. Contact ID only supports four-digit account numbers. This results in the control panel automatically truncating account numbers for four digits.

Alternate Communication Options

- **Address:**
  - **IP Address 1, Destination 1:** 3506
  - **IP Address 2, Destination 1:** 3514
  - **IP Address 1, Destination 2:** 3522
  - **IP Address 2, Destination 2:** 3530
- **Default:** 0
- **Selections:** 0, 1, 3, 5, 7

	Enter This Data Digit to Select Options															
Alternate Communication Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alternate Communication	•															
Enable Alternate Communication		•		•		•		•								
Enable Anti-Replay				•				•								
Use ARC Acks						•		•								
Reserved																

- **Enable Alternate Communication:** Select this option to enable network communication. You must enter at least one IP address as a routing destination. See *IP Address 1 (2) for Destination 1 (2)* on page 129 for more information.
- **Enable Anti-Replay:** Anti-replay prevents unauthorized messages from being sent to the ARC and being recognized as having originated from the control panel. Select this option to use the anti-replay procedure. To use this option, make sure "Include IP Address" is enabled.
- **Use ARC Acks:** If this option is enabled, the control panel waits for an acknowledgment (Ack) from the ARC before sending a second message. If this option is disabled, the control panel waits approximately 120 sec. between sending messages (disable only for special applications).

Remote Programming Callback Number Alternate Communication Options

- **Address:** 3538
- **Default:** 0
- **Selections:**

  0 = No Alternate Communication
  1 = Enable Alternate Communication

If an IP address is entered into the Remote Programming Callback Number addresses (Addresses 0181-0212), RPS can be used to program the control panel over an Ethernet network.

Select "1" if an IP address is entered into the Remote Programming Callback Number addresses.

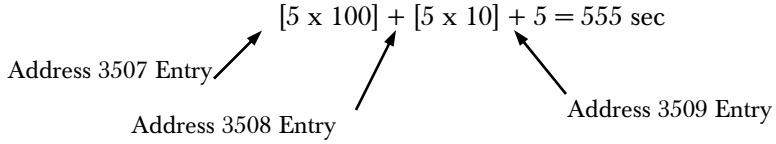
Alternate Communication Wait Time

- **Address:**
  - **IP Address 1, Destination 1:** 3507 to 3509
  - **IP Address 2, Destination 1:** 3515 to 3517
  - **IP Address 1, Destination 2:** 3523 to 3525
  - **IP Address 2, Destination 2:** 3531 to 3533
- **Default:** 0, 1, 3
- **Selections:** 0 to 1665 sec

Use this parameter to define how long the DX4020 waits before attempting to send additional reports to the ARC.

This parameter uses three addresses for each routing destination. In the first address, enter the 100's value (this value is multiplied by 100). In the second address, enter the 10's value (this value is multiplied by 10). In the third address, enter the 1's value (the 100's and 10's values are added to the 1's value).

The following example shows how to get an alternate communication wait time of 555 sec for IP Address 1, Destination 1:



If the "Use ARC Acks" option is enabled and the alternate communication wait time is less than 5 sec, a minimum of 5 sec is automatically used.

You can enter a value between 0 and 15 for each alternate communication wait time address.

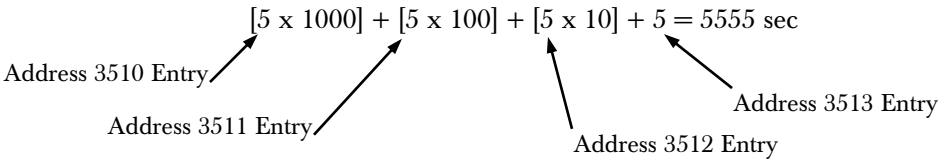
Alternate Communication Heartbeat Period

- **Address:**
  - **IP Address 1, Destination 1:** 3510 to 3513
  - **IP Address 2, Destination 1:** 3518 to 3521
  - **IP Address 1, Destination 2:** 3526 to 3529
  - **IP Address 2, Destination 2:** 3534 to 3537
- **Default:** 0, 0, 7, 5
- **Selections:** 0 to 1275 sec

Use this parameter to set the rate that the DX4020 polls the ARC.

This parameter uses four addresses for each routing destination. In the first address, enter the 1000's value (this value is multiplied by 1000). In the second address, enter the 100's value (this value is multiplied by 100). In the third address, enter the 10's value (this value is multiplied by 10). In the fourth address, enter the 1's value (the 1000's, 100's, and 10's values are added to the 1's value).

The following example shows how to get an alternate communication wait time of 5555 sec for IP Address 1, Destination 1:



If the entries equal 0 sec, this parameter is disabled.

If the entries equal 1 to 4 sec, this parameter is automatically set to 5 sec.

If the entries exceed 1275 sec, this parameter is automatically set to 1275 sec.

Alternate Communication Heartbeat Retries

- **Address:** 3539 to 3540
- **Default:** 0, 2
- **Selections:** 0 to 99 retries

Use this parameter to define how many times the DX4020 tries to send reports to the ARC before declaring a communication failure.

This parameter uses two addresses. Address 3539 sets the 10's value, and Address 3540 sets the 1's value. For example, if you want the DX4020 to make 10 communication attempts before declaring a communication failure, enter "1" in Address 3539 and "0" in Address 3540.

Network Interface Module Options

- **Address:** 3541
- **Default:** 0
- **Selections:** 0 to 3

	Enter This Data Digit to Select Options															
Network Interface Module Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No Alternate Communication	•															
Enable Alternate Communication		•		•												
Include IP Address			•	•												
Reserved																
Reserved																

- **Enable Alternate Communication:** Select this option to supervise the connection between the control panel and the network interface module (DX4020). The network interface module's DIP switch address must be set to 134. Do not select this option if there is no network interface module connected to the system.
- **Include IP Address:** Select this option to use the IP address entered in *IP Address 1 (2) for Destination 1 (2)* (see page 129) instead of the IP address stored in the DX4020 for network communication. Select "Enable Alternate Communication" in *Alternate Communication Options* (refer to page 132) for the appropriate IP address. Select this option when using a DX4020. Do not select this option when using a DX4010i.

4.11 DACM Configuration

The control panel supports up to 8 DACMs. However, each DACM added to the system replaces one keypad. If 8 DACMs are added, you cannot add a keypad. For full system control, make sure at least one text keypad is included in the system.

For complete installation, programming, addressing, and operation instructions, see the documentation supplied with the DACM.

Configuring a DACM into the control panel is a three-step process:

1. Using *Table 13* on page 80, assign the DACM's door contact as a location. For example, DACM #1 will be assigned to Location #5.
    a. Enter "6" at Address 0726 for the device type.
    b. Assign a zone function and enter it in Address 0727.
    c. Assign an area to the DACM in Address 0728. Each DACM's door contact can only use one location.
    d. Repeat the area assignment in *Keypad/Door Access Control Module (DACM) Area Options*. For example, if you selected Area 1 for Address 0728, then you must enter "9" in Address 0679. This address is for Keypad/DACM #1. "9" identifies the device as a DACM #1 in Area 1.
    e. Assign a zone number in Addresses 0729-0730 if the zone number must be different than the location number.
2. Enter the location number in *DACM Location Assignment*. For this example, enter "0" in Address 3546, and "5" in Address 03547. This assigns the control panel's Location #5 to DACM #1.
3. Assign global options in Address 3562 (see *DACM Global Options* on page 137). The entry you make here affects all DACMs connected to the control panel.

Keypad/Door Access Control Module (DACM) Area Options

- **Address:**
  Keypad/DACM 1: 0679
  Keypad/DACM 2: 0681
  Keypad/DACM 3: 0683
  Keypad/DACM 4: 0685
  Keypad/DACM 5: 0687
  Keypad/DACM 6: 0689
  Keypad/DACM 7: 0691
  Keypad/DACM 8: 0693
- **Default:**
  Keypad/DACM 1: 1 (Device is a keypad/DACM assigned to Area 1)
  Keypads/DACMs 2 to 8: 0 (No keypad/DACM assigned)
- **Selections:** 0 to 4, 9 to 12

	Enter This Data Digit to Select Options															
Keypad/DACM Area Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Keypad/DACM not assigned (disabled)	•															
Assign Keypad/DACM to Area 1		•								•						
Assign Keypad/DACM to Area 2			•								•					
Assign Keypad/DACM to Area 3 (DS7240V2 only)				•								•				
Assign Keypad/DACM to Area 4 (DS7240V2 only)					•								•			
Device is a Keypad		•	•	•	•											
Device is a DACM										•	•	•	•			

This parameter identifies the device connected to the control panel's Data Bus (Addresses 1 to 8) as a DACM, and assigns the DACM to an area.

The control panel supervises the connection to the DACM. If it fails to communicate with the control panel, the control panel sends a "DBus Missing" {125} report.

DACM Location Assignment

- **Address:**
  - **DACM 1:** 3546 to 3547
  - **DACM 2:** 3548 to 3549
  - **DACM 3:** 3550 to 3551
  - **DACM 4:** 3552 to 3553
  - **DACM 5:** 3554 to 3555
  - **DACM 6:** 3556 to 3557
  - **DACM 7:** 3558 to 3559
  - **DACM 8:** 3560 to 3561
- **Default:** 0,0
- **Selections:**
  - **DS7240V2:** 0,0 to 4,0
  - **DS7220V2:** 0,0 to 2,4

A DACM door contact can occupy any location in the control panel. Use this parameter to assign a control panel location to a DACM door contact.

DACM Global Options

- **Address:** 3562
- **Default:** 0
- **Selections:** 0, 1, 3-5, 7

	Enter This Data Digit to Select Options															
DACM Global Options	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
No DACM Global Options Selected	•															
Enable Arming Confirmation		•		•		•		•								
Any User Confirms Arming				•				•								
Use Tamper-Wired Processing					•	•		•								
Reserved																

This is a global parameter that affects all DACMs connected to the control panel.

- **Enable Arming Confirmation:** If this option is enabled, verifying a user at the DACM reader during Exit Delay cancels the remaining Exit Delay time and arms the control panel immediately. Only the user who started the arming process can confirm arming. If this option is disabled, verifying a user at the DACM reader during Exit Delay cancels the arming process (the system does not arm).
- **Any User Confirms Arming:** If this option is enabled, any user can confirm system arming. If this option is disabled, only the user who started the arming process can confirm arming. This option only applies when "Enable Arming Confirmation" is selected.
- **Use Tamper-Wired Processing:** If this option is enabled, an open door reports as faulted (the zone assigned to the DACM functions as a tamper-wired zone). If this option is disabled, an open door reports as shorted (the zone assigned to the DACM functions as a single EOL zone).

5. Reference Materials

5.1 Control Panel Events and Reporting Formats

The following table includes each control panel event, the description for each event as it appears in the control panel log, the reports sent for each event, the zone types linked to the event, and the RPS Event Alert Group number. The RPS Event Group numbers also correspond with the Personal Dialing Format Event Group numbers. See *Personal Dialing Format* on page 10 for more information.

The last column, Status Reports, indicates System Status events. An "R" indicates that reports for the event follow the System Status routing. An "S" indicates that the event follows the System Status Swinger Count. System reports do not include an Area number; they use the account number for Area 1.

If the control panel is configured for network communication, reports are sent using the Contact ID format.

The event numbers shown in the following table are the same numbers that show up on a pager for each corresponding report.

Table 31: Control Panel Events and Reporting Formats

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
01	AC Fail	AT AC Trouble	301 AC Loss	AC Power to panel interrupted.		12	R	S
02	AC Restore	AR AC Restoral	301 AC Loss	AC Power to panel restored.		12	R	S
03	Alarm,Tamper	TA Tamper Alarm	137 Tamper	Alarm, Tamper Zone Type.	4-Tamper	3		
04*	Alarm,Emergency	QA Emergency Alarm	101 Personal Emergency	Alarm, Emergency Zone Type or ABC key programmed for emergency response. [Q] button.	5- Emergency	3		
05*	Alarm,Panic	PA Panic Alarm	120 Panic	Alarm, Panic-Visible Zone Type. [Q] button.	6- Visible Panic	3		
06*	Alarm,Invisible	HA Holdup Alarm	120 Panic	Alarm, Panic- Invisible Zone Type or ABC key programmed for panic response. [Q] button.	7-Invisible Panic	3		
07	Alarm,24-hr Burg	BA Burglary Alarm	133 24 Hr Safe	Alarm, Burglary Zone Type.	8- Burglary 15 - Door	3		
08	Alarm,Cntrl,Dly	BA Burglary Alarm	134 Entry/Exit	Alarm, Delay 1 or Delay 2 Zone Type.	11- E/E Delay 1 12- E/E Delay 2	3		
09	Alarm,Cntrl	BA Burglary Alarm	130 Burglary	Alarm, Keyswitch or Follower or Instant Zone Types.	10- Keyswitch 13- Follower 14- Instant	3		
10	Cross,Tamper	BM Burglary Alarm Cross Zone	137 Tamper	Alarm, Tamper Zone Type with Cross Zone Option selected.	4-Tamper	3		
11	Cross,Emergency	BM Burglary Alarm Cross Zone	101 Personal Emergency	Alarm, Emergency Zone Type with Cross Zone Option selected.	5- Emergency	3		
12	Cross,Panic	BM Burglary Alarm Cross Zone	120 Panic	Alarm, Panic-Visible Zone Type with Cross Zone Option selected.	6- Visible Panic	3		
13	Cross,Invisible	BM Burglary Alarm Cross Zone	120 Panic	Alarm, Panic- Invisible Zone Type with Cross Zone Option selected.	7-Invisible Panic	3		
14	Cross,24hr Burg	BM Burglary Alarm Cross Zone	133 24 Hr Safe	Alarm, Burglary Zone Type with Cross Zone Option selected.	8- Burglary	3		

* Keypad [A], [B], or [C] keys report as Zones 100, 101, and 102. The [Q] button on a keyfob reports as User Number +200.

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
15	Cross,Cntrl,Dly	BM Burglary Alarm Cross Zone	134 Entry/Exit	Alarm, Delay 1 or Delay 2 Zone Type with Cross Zone Option selected.	11- E/E Delay 1 12- E/E Delay 2	3		
16	Cross,Cntrl	BM Burglary Alarm Cross Zone	130 Burglary	Alarm, Follower or Instant Zone Types with Cross Zone Option selected.	13- Follower 14- Instant	3		
17	Cross,Unverified	BG Unverified Event Burglary	378 Cross-zone Trouble	A fault on one non-fire zone type with the Cross Zone Option selected. This is not an alarm event.	any with Cross Zone Option	3		
18	Alarm Exit Error	EA Exit Alarm	374 Exit Error (zone)	Zone faulted at the end of Exit Delay.	11- E/E Delay 1 12- E/E Delay 2	3		
19	Alrm Recent Clse	CR Recent Closing	134 Entry/Exit	Alarm event within 2 min. of closing.	11- E/E Delay 1 12- E/E Delay 2	3		
20	Alrm Recent Clse	CR Recent Closing	130 Burglary	Alarm event within 2 min. of closing.	10- Keyswitch 13- Follower 14- Instant	3		
21	Auto On Extended	CE Closing Extend	464 Auto-arm Time Extended	Auto On Sked delayed one h by user. Report follows Open/Close routing.		10		
22	Battery Low	YT System Battery Trouble	302 Low System Battery	Panel battery is low.		12	R	S
23	Battery Missing	YM System Battery Missing	311 Battery Missing/Dead	Panel battery is missing. Very low, shorted, or open batteries are reported as missing.		12	R	S
24	Rstrl Batt Low	YR System Battery Restoral	302 Low System Battery	Battery restoral from low battery.		12	R	S
25	Rstrl Bat Missng	YR System Battery Restoral	311 Battery Missing/Dead	Battery Restoral from missing battery		12	R	S
26	Bypass,Fire,User	FB Fire Bypass	571 Fire bypass	Selective bypass by user, fire zone types.	1- Fire 2- Fire with Alarm Verification	15		
27	Bypass,Fire, RPS	FB Fire Bypass	571 Fire bypass	Selective bypass by RPS, fire zone types.	1- Fire 2- Fire with Alarm Verification			
28	Bypass,Ctrl,User	BB Burglary Bypass	570 Zone/Sensor bypass	Selective bypass by user, controlled zone types.	10 to 15- Zone Types	15		
29	Bypass,Ctrl, RPS	BB Burglary Bypass	570 Zone/Sensor bypass	Selective bypass by RPS, zone types.	10 to 15- Zone Types			
30	Bypass,24hr,User	BB Burglary Bypass	572 24-Hr Zone Bypass	Selective bypass by user, 24-hour non-fire zone types.	3 to 9- 24-hour, Non-Fire Zone Types	15		
31	Bypass,24hr, RPS	BB Burglary Bypass	572 24-Hr Zone Bypass	Selective bypass by RPS, 24-hour non-fire zone types.	3 to 9- 24-hour, Non-Fire Zone Types			
32	Bypass,Forced Zn	BB Burglary Bypass	570 Zone/Sensor bypass	Zone force armed at force arming.	10 to 15- Zone Types	15		

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
33	Bypass,Swinger	BB Burglary Bypass	575 Swinger Shunt	Zone Swinger Shunted.	All zone types	15		
34	UnBypss,Fire, Usr	FU Fire UnBypass	571 Fire bypass	User cleared bypass (unbypass), Fire zone types.	1- Fire 2- Fire with Alarm Verification	15		
35	UnBypss,Ctrl,Usr	BU Burglary Unbypass	570 Zone/Sensor bypass	User cleared bypass (unbypass), controlled zone types.	10 to 15- Zone Types	15		
36	UnBypss,24hr,Usr	BU Burglary Unbypass	572 24-Hr Zone Bypass	User cleared bypass (unbypass), 24-hour zone types.	3 to 9- 24-hour, Non-Fire Zone Types	15		
37	Call for Service	YX Service Required	616 Service Request	This report sent automatically at Call for Service Interval. It does not indicate a trouble condition.		12	R	
38	Cancel Alarm	BC Burglary Cancel	406 Cancel	User acknowledged active alarm before Bell Time expired, non-fire zone types.		8		
39	Cancel Fire	FC Fire Cancel	406 Cancel	User acknowledged active alarm before Bell Time expired, fire zone types.		7		
40	CheckSum Fail	YF Parameter Checksum Fail	303 RAM Checksum Bad	Checksum on panel's parameters failed. Panel program should be verified.		12	R	S
41	ChkSum Fail,DBus	YF Parameter Checksum Fail	330 System Peripheral trouble	Checksum on Data Bus device parameters failed. Device should be checked.		12	R	S
42	Cls,All,+Dly,Skd	CA Automatic Closing	403 Automatic O/C	System turned All On with Entry/Exit Delay by Sked.		10		
43	Cls,All,+Dly,KS	CS Closing Keyswitch	409 Keyswitch O/C	System turned All On with Entry/Exit Delay by Keyswitch.		10		
44	Cls,All,+Dly, RPS	CQ Remote Closing	400 Open/Close	System turned All On with Entry/Exit Delay by RPS.				
45	Cls,All,+Dly,Tel	CQ Remote Closing	407 Remote Arm/Disarm	System turned All On with Entry/Exit Delay by Telephone.		10		
46	Cls,All,+Dly,Usr	CL Closing Report	401 O/C by User	System turned All On with Entry/Exit Delay by User.		10		
47	Cls,All,-Dly,RPS	CQ Remote Closing	400 Open/Close	System turned All On with no delay (instant) by RPS.				
48	Cls,All,-Dly,Usr	CL Closing Report	401 O/C by User	System turned All On with no delay (instant) by User.		10		
49	Cls,Prt,+Dly,Skd	CA Automatic Closing	456 Partial Arm	System armed Perimeter Only with Entry/Exit delay by Sked.		10		
50	Cls,Prt,+Dly,KS	CS Closing Keyswitch	442 Keyswitch Armed Stay	System armed Perimeter Only with Entry/Exit Delay by Keyswitch.		10		
51	Cls,Prt,+Dly, RPS	CQ Remote Closing	456 Partial Arm	System armed Perimeter Only with Entry/Exit Delay by RPS.				
52	Cls,Prt,+Dly,Usr	CL Closing Report	456 Partial Arm	System armed Perimeter Only with Entry/Exit Delay by User.		10		
53	Cls,Prt,-Dly, RPS	CQ Remote Closing	456 Partial Arm	System armed Perimeter Only with no delay (instant) by RPS.				

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
54	Cls,Prt,-Dly,Usr	CL Closing Report	456 Partial Arm	System armed Perimeter Only with no delay (instant) by User.		10		
55	Frc,All,+Dly,Skd	CF Forced Closing	403 Automatic O/C	System forced All On with Entry/Exit Delay by Sked.		10		
56	Frc,All,+Dly,KS	CF Forced Closing	400 O/C	System forced All On with Entry/Exit Delay by Keyswitch.		10		
57	Frc,All,+Dly, RPS	CF Forced Closing	400 O/C	System forced All On with Entry/Exit Delay by RPS.				
58	Frc,All,+Dly,Tel	CF Forced Closing	400 O/C	System forced All On with Entry/Exit Delay by Telephone.		10		
59	Frc,All,+Dly,Usr	CF Forced Closing	401 O/C by User	System forced All On with Entry/Exit Delay by User.		10		
60	Frc,All,-Dly,RPS	CF Forced Closing	400 O/C	System forced All On with no delay (instant) by RPS.				
61	Frc,All,-Dly,Usr	CF Forced Closing	401 O/C by User	System forced All On with no delay (instant) by User.		10		
62	Frc,Prt,+Dly,Skd	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with Entry/Exit Delay by Sked.		10		
63	Frc,Prt,+Dly,KS	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with Entry/Exit Delay by Keyswitch.		10		
64	Frc,Prt,+Dly, RPS	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with Entry/Exit Delay by RPS.				
65	Frc,Prt,+Dly,Usr	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with Entry/Exit Delay by User.		10		
66	Frc,Prt,-Dly, RPS	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with no delay (instant) by RPS.				
67	Frc,Prt,-Dly,Usr	NF Forced Perimeter Arm	456 Partial Arm	System forced Perimeter Only with no delay (instant) by User.		10		
68	Reserved							
69	Comm Fail	YC Communications Fail	354 Failure to communicate event	Report failed to reach routing destination.		12	R	S
70	CommFail, AltComm	YC Communications Fail	354 Failure to communicate event	Report failed to reach routing destination configured for Alternate Communication.		12	R	S
71	Comm Restoral	YK Communications Restoral	354 Failure to communicate event	After communication fail, report sent successfully to routing destination.		12	R	S
72	CommRstl, AltComm	YK Communications Restoral	354 Failure to communicate event	After communication fail, report sent successfully to routing destination configured for Alternate Communication.		12	R	S
73	Date/Time Change	JT Time Changed	625 Time/Date reset	Date/Time in panel changed.		12	R	
74*	Duress	HA Hold Up Alarm	121 Duress	User entered Duress PIN or pressed Panic key sequence or [Q] button** on RF Keyfob. The Duress report is sent in addition to any other report that the user's action would generate.		1		

* This event reports a user number + 200 when sent using SIA and Contact reporting formats.

** See *[Q] Button Alarm Response Options* on page 76 for more information.

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
75	Fire,Alarm	FA Fire Alarm	110 Fire	Alarm event on fire zone type.	1- Fire 2- Fire with Alarm Verification	2		
76	Fire,Cross	FM Fire Alarm Cross Zone	110 Fire	Verified alarm event on fire zone type with Cross Zone Option. See *Zone Response Options* on page 103.	1- Fire	2		
77	Fire,Un-verified	FG Unverified Event-Fire	378 Cross-zone Trouble	Unverified alarm event on fire zone type with Cross Zone Option. Or unverified event on Fire Verify zone type.	1- Fire 2- Fire with Alarm Verification	5		
78	Fire,Missing	FY Missing Fire Trouble	373 Fire Trouble	Fire zone type assigned to zone expander (wired or RF) not responding to panel's status poll.	1- Fire 2- Fire with Alarm Verification	5		
79	Fire,Alrm,Rstl	FH Fire Alarm Restore	110 Fire	Restoral from alarm, Fire zone types.	1- Fire 2- Fire with Alarm Verification	7		
80	Fire,Trouble	FT Fire Trouble	373 Fire Trouble	Fault (Trouble) condition on Fire zone types.	1- Fire 2- Fire with Alarm Verification	5		
81	Fire,Trbl,Rstl	FJ Fire Trouble Restore	373 Fire Trouble	Restoral from Trouble, Fire zone types.	1- Fire 2- Fire with Alarm Verification	7		
82	Instl Mode,Start	LB Local Program	466 Service On Premises	Installer PIN entered. Installer mode accessed.		11	R	
83	Instl Mode,End	LX Local Programming Ended	466 Service Off Premises	Installer mode exited.		11	R	
84	Log Overflow	JO Log Overflow	624 Event Log Overflow	Panel log overflow condition. Oldest events being overwritten.		12	R	
85	Log Threshold	JL Log Threshold	623 Event Log	Panel log reached threshold. See *Log Supervision Configuration* on page 25.		12	R	
86	AltCom Low Signl	XL Low Received Signal Strength	350 Communication Trouble	Low Signal Strength detected on Alternate Communication device.		12	R	S
87	Missing,Alarm	UZ Untyped Missing Alarm	150 General Alarm	Zone assigned to zone expander (wired or RF) not responding to panel's status poll while the area is armed.	8- 24-hr Burg 10-15 Zone Types	3		
88	Missing,Trouble	UY Untyped Missing Trouble	382 Loss of supervision - RPM	Zone assigned to zone expander (wired or RF) not responding to panel's status poll while the area is disarmed.	3-8, 10-15 Zone Types	6		
89	Open,Skd	OA Automatic Opening	403 Automatic O/C	Opening by Sked.		10		
90	Open,RPS	OQ Remote Opening	400 Open/Close	Opening by RPS.				

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
91	Open,Usr	OP Opening Report	401 O/C by User	Opening by user, by ID reported.		10		
92	Open,KS	OS Opening Keyswitch	409 Keyswitch O/C	Opening by Keyswitch.		10		
93	Open,Skd,Alarm	OR Disarm from Alarm	403 Automatic O/C	Opening after Alarm event by Sked.		10		
94	Open,RPS,Alarm	OR Disarm from Alarm	400 Open/Close	Opening after Alarm event by RPS.				
95	Open,Usr,Alarm	OR Disarm from Alarm	401 O/C by User	Opening after Alarm event, ID reported.		10		
96	Open,KS,Alarm	OR Disarm from Alarm	409 Keyswitch O/C	Opening after Alarm event by Keyswitch.		10		
97	Reserved							
98	Params Changed	YG Parameter Changed	306 Panel Programming Changed	Panel parameters changed.		12	R	
99	Phone Line Fail	LT Phone Line Trouble	351 Telco 1 fault	Phone line voltage less than 3 V for 40 sec.		12	R	S
100	Phone Line Rstl	LR Phone Line Restoral	351 Telco 1 fault	After Phone Line Fail event, phone line voltage detected at greater than 3 V for 40 sec.		12	R	S
101	Bad Call to RPS	RA Remote Programmer Call Failed	413 Unsuccessful access	Panel attempted call to RPS, but was unsuccessful.		12	R	
102	RPS Access Fail	RU Remote Program Fail	413 Unsuccessful access	RPS attempted to connect to panel but was not successful.			R	
103	RPS Access OK	RS Valid Remote Access	412 Successful Download/ Access	RPS successfully connected to and disconnected from panel.			R	
104	Re-Boot,Panel	RR Power Up	305 System reset	Normal start up or reset after programming.			R	S
105	Re-Boot,DBus	RR Power Up	339 Exp. Module Reset	Unexpected reset (reboot) from Data Bus device.		12	R	S
106	Output Reset,Usr	RO Relay Open	320 Sounder/Relay	Output Reset by User.		16	R	
107	Output Reset,Skd	RO Relay Open	320 Sounder/Relay	Output Reset by Sked.		16	R	
108	Output Reset, RPS	RO Relay Open	320 Sounder/Relay	Output Reset by RPS.			R	
109	Output Set,Usr	RC Relay Close	320 Sounder/Relay	Output Set by User.		16	R	
110	Output Set,Skd	RC Relay Close	320 Sounder/Relay	Output Set by Sked.		16	R	
111	Output Set,RPS	RC Relay Close	320 Sounder/Relay	Output Set by RPS.			R	
112	Rstrl,Tamper	TR Tamper Restoral	137 Tamper	Restoral from alarm, Tamper zone type.	4- Tamper	8		
113	Rstrl,Emergency	QR Emergency Restoral	101 Personal Emergency	Restoral from alarm, Emergency zone type.	5- Emergency	8		
114	Rstrl,Panic	PR Panic Restoral	120 Panic	Restoral from alarm, Panic zone type.	6- Visible Panic	8		

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
115	Rstrl,Invisible	HR Holdup Restoral	120 Panic	Restoral from alarm, Invisible zone type.	7-Invisible Panic	8		
116	Rstrl,24-hr Burg	BR Burglary Restoral	133 24hr (Safe)	Restoral from alarm, 24-hour burglary zone types.	8- Burglary 15 – Door	8		
117	Rstrl,Cntrl,Dly	BR Burglary Restoral	134 Entry/Exit	Restoral from alarm, Delay 1 or 2 zone types.	11- E/E Delay 1 12- E/E Delay 2	8		
118	Rstrl,Cntrl	BR Burglary Restoral	130 Burglary	Restoral from alarm, Keyswitch, Follower, or Instant zone types.	10- Keyswitch 13- Follower 14- Instant	8		
119	Rcvr Jam	XQ RF Interference	344 RF Receiver Jam Detect	Jammed condition detected on premises RF receiver.		9	R	S
120	Rcvr Jam Rstl	XH RF Interference Restoral	344 RF Receiver Jam Detect Restoral	Jammed condition detected on premises RF receiver cleared.		9	R	S
121	RF Battery Low	XT Transmitter Battery Trouble	384 RF Low Battery	Low Battery detected on premises RF transmitter.	Any zone type	9		
122	RF Battery Rstl	XR Transmitter Battery Restoral	384 RF Low Battery	Low Battery condition detected on premises RF transmitter cleared.	Any zone type	9		
123	RF Tamper Trbl	TT Tamper Trouble	383 Sensor Tamper	Premises RF Transmitter Tamper Fault (Trouble).	Any zone type	9		
124	RF Tamper Rstl	TR Tamper Trouble Restore	383 Sensor Tamper	Premises RF Transmitter Tamper Restoral.	Any zone type	9		
125	Dbus Missing	EM Expansion Device Missing	333 Exp. Module Failure	Data Bus device not responding to polling.		12	R	S
126	Dbus Missng,Rstl	EN Expansion Missing Restore	333 Exp. Module Failure	Data Bus device declared as missing now responding to polling.		12	R	S
127	Dbus Tamper	ES Expansion Device Tamper	341 Exp. Module Tamper	Tamper open on Data Bus Device Tamper.		12	R	S
128	Dbus Tamper,Rstl	EJ Expansion Tamper Restore	341 Exp. Module Tamper	Data Bus Device Tamper Restoral.		12	R	S
129	Dbus Trouble	ET Expansion Trouble	330 System Peripheral Trouble	Fault (Trouble) detected on Data Bus Device.		12	R	S
130	Dbus Troubl,Rstl	ER Expansion Restoral	330 System Peripheral Trouble	Data Bus Device Fault (Trouble) condition cleared.		12	R	S
131	Dbus OverCurrent	YI Overcurrent Trouble	330 System Peripheral Trouble	Over current condition detected on Data Bus device.		12	R	S
132	Dbus OvrCur,Rstl	YJ Overcurrent Restore	330 System Peripheral Trouble	Over current condition on Data Bus device restored.		12	R	S
133	Sensor Mon Trbl	NA No Activity	391 Sensor Watch trouble	Sensor fault (trouble) detected. Reports follow zone trouble routing.	11-15 Zone Types	6		
134	Sensor Mon Rstl	NS Activity Restored	391 Sensor Watch trouble	Sensor trouble condition restored. Reports follow zone trouble routing.	11-15 Zone Types	6		
135	Sensor Reset	Local Event Only		User entered System Reset key sequence ([#][4][7]).		12		

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
136	System Inactive	CD Closing Delinquent		System was not armed in Inactive Interval.. System Reset key sequence ([#][4][7]) or arming resets this trouble.		12	R	
137	Test,OK	RP Automatic Test	602 Period Test Report	No system troubles at automatic test report time.		13		
138	Test,Off-Normal	RY Test Off Normal	608 Period Test Report, System Trouble Present	System trouble present at test time.		13		
139	Trbl,Tamper	TT Tamper Trouble	380 Sensor Trouble	Trouble condition on Tamper or any tamper-wired zones.	4-Tamper or any zone	6		
140	Trbl,Emergency	QT Emergency Trouble	380 Sensor Trouble	Trouble condition on Emergency zone type.	5- Emergency	6		
141	Trbl,Panic	PT Panic Trouble	375 Panic Zone Trouble	Trouble condition on Panic zone type.	6- Visible Panic	6		
142	Trbl,Invisible	HT Holdup Trouble	375 Panic Zone Trouble	Trouble condition on Invisible zone type.	7-Invisible Panic	6		
143	Trbl,24-hr Burg	BT Burglary Trouble	380 Sensor Trouble	Trouble condition on Burglary zone type.	8- Burglary 15 - Door	6		
144	Trbl,Cntrl,Dly	BT Burglary Trouble	380 Sensor Trouble	Trouble condition on Delay zone types.	11- E/E Delay 1 12- E/E Delay 2	6		
145	Trbl,Cntrl	BT Burglary Trouble	380 Sensor Trouble	Trouble condition on Keyswitch, Follower, and Instant zone types.	10- Keyswitch 13- Follower 14- Instant	6		
146	Rstrl,Trbl,Tmpr	TJ Tamper Trouble Restore	380 Sensor Trouble	Restoral from Tamper trouble condition.	4- Tamper or any zone	8		
147	Rstrl,Trbl,Emerg	QJ Emergency Trouble Restore	380 Sensor Trouble	Restoral from trouble condition on Emergency zone type.	5- Emergency	8		
148	Rstrl,Trbl,Panic	PJ Panic Trouble Restore	375 Panic Zone Trouble	Restoral from trouble condition on Panic zone type.	6- Visible Panic	8		
149	Rstrl,Trbl,Invis	HJ Holdup Trouble Restore	375 Panic Zone Trouble	Restoral from trouble condition on Invisible zone type.	7-Invisible Panic	8		
150	Rstrl,Trbl,24-hr	BJ Burglary Trouble Restore	380 Sensor Trouble	Restoral from trouble condition on Burglary zone type.	8- Burglary 15 - Door	8		
151	Rstrl,Trbl,Dly	BJ Burglary Trouble Restore	380 Sensor Trouble	Restoral from trouble condition on Delay zone types.	11- E/E Delay 1 12- E/E Delay 2	8		
152	Rstrl,Trbl,Cntrl	BJ Burglary Trouble Restore	380 Sensor Trouble	Restoral from trouble condition on Keyswitch, Follower, and Instant zone types.	10- Keyswitch 13- Follower 14- Instant	8		
153	User Code Area Set	JY User Code Added		User Code 'added' by assigning area.		16	R	
154	User Code Change	JV User Code Changed		User Code changed.		16	R	
155	User Code Delete	JX User Code Deleted		User Code deleted.		16	R	
156	User Code Tamper	JA User Code Tamper	461 Wrong Code Entry	Invalid User Codes entered at keypad exceeded User Tamper Retry Count. See page 62.		16	R	
157	User Level Set	JZ User Level Set		User Level set.		16	R	

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
158	Walk Test Start	TS Test Start	607 Walk Test Mode	Walk Test started with Walk Test key sequence ([#][4][4]).		11		
159	Walk Test End	TE Test End	607 Walk Test Mode	Walk Test ended by user or timed out.		11		
160	Siren Trouble	YA Bell Fault	320 Sounder Relay	Trouble condition detected on PO 2 configured as supervised siren output.		12	R	S
161	Siren Restoral	YH Bell Restored	320 Sounder Relay	Trouble condition on supervised siren output cleared.		12	R	S
162	Grnd Fault	IA Equipment Failure Condition	310 Ground Fault	Ground fault detected on panel's sensor loops, Option Bus, or Aux power outputs.		12	R	S
163	Grnd Fault,Rstl	IR Equipment Fail Restoral	310 Ground Fault	Ground fault condition cleared.		12	R	S
164	First Open	OP Opening Report	400 Open/Close	Panel is configured for multiple area first to open, last to close function. See *Arming Options 2* on page 38. First area has opened.		10		
165	Last Close	CL Closing Report	400 Open/Close	Panel is configured for multiple area first to open, last to close function. See *Arming Options 2* on page 38. Last area has closed.		10		
166	AltCom Cond	NC Network Condition	350 Communication Trouble	Trouble detected on Alternate Communication network.		12	R	S
167	AltComm Fail	NT Network Failure	350 Communication Trouble	Network failure detected on Alternate Communication network.		12	R	S
168	AltComm Rstrl	NR Network Restoral	350 Communication Trouble	Network communication resumed on Alternate Communication network.		12	R	S
169	Reserved							
170	Reserved							
171	Reserved							
172	Reserved							
173	Rstrl,Swinger	BU Burglary Unbypass	575 Swinger Shunt	Restoral from Swinger Shunt.	Any zone type	8		
174	Rstrl,Fire,Miss	Local Event Only	Local Event Only	Restoral from Fire Missing. Local event, no report.	1- Fire 2- Fire with Alarm Verification	7		
175	Rstrl,Alarm,Miss	Local Event Only	Local Event Only	Restoral from Missing, Non-Fire zones. Local event, no report sent.	Any non-fire zone type	8		
176	Rstrl,Trble,Miss	Local Event Only	Local Event Only	Restoral from Fault (Trouble), Non-Fire zones. Local event, no report.	Any non-fire zone type	8		
177	Rstl,Low Signl	Local Event Only	Local Event Only	Restoral from Alternate Communication Low Signal Strength event.		12	R	S
178	UnBypss,Fire,RPS	FU Fire Unbypass	571 Fire bypass	Bypass on Fire zone type cleared using RPS (un-bypass).	1- Fire 2- Fire with Alarm Verification			

Table 31: Control Panel Events and Reporting Formats (continued)

Event	Event as shown in Control Panel Log	SIA Report	Contact ID Report	Event Description	Zone Types Linked to Event	RPS Event Group	Status Report	
179	UnBypss,Ctrl,RPS	BU Burglary Unbypass	570 Zone/Sensor bypass	Bypass on zone type cleared using RPS (un-bypass)	10 to 15- Zone Types			
180	UnBypss,24hr,RPS	BU Burglary Unbypass	572 24 hour zone bypass	Bypass on 24-hour zone type cleared using RPS (un-bypass)	3 to 9- 24-hour, Non-Fire Zone Types			
181*	RF Battery Low	XT Transmitter Battery Trouble	384 RF Low Battery	Low battery condition on RF Keyfob.		9	R	
182*	RF Battery Rstl	XR Transmitter Battery Restoral	384 RF Low Battery	Low battery condition on RF Keyfob restored.		9	R	
183	Trbl,Default PIN	Local Event Only	Local Event Only	Installer or User PINS have not been changed from default.				
184	Rstl,Default PIN	Local Event Only	Local Event Only	Installer or User default PINS have been changed.				
185	Failed to Arm	EE Exit Error	454 Failed to Close	Arming attempt failed.		3		
186	Verified Alarm	BV Burglary Verified Alarm	139 Intrusion	Verified Alarm.		3		
187	Dbus Missng Alrm	TA Tamper Alarm	137 Tamper Alarm	Data bus device not responding to polling. (Shows Zone 41)		12	R	S
188	Dbs Mis Alm Rstl	TR Tamper Restoral	137 Tamper Alarm	Data bus device declared as missing now responding to polling. (Shows Zone 41)		12	R	S
189	Dbus Tamper Alrm	TA Tamper Alarm	137 Tamper Alarm	Tamper open on Data bus Device Tamper. (Shows Zone 42)		12	R	S
190	Dbs Tmp Alm Rstl	TR Tamper Restoral	137 Tamper Alarm	Data bus device tamper restoral. (Shows Zone 42)		12	R	S
191	Dbus Trouble Alm	TA Tamper Alarm	137 Tamper Alarm	Trouble detected on data bus device. (Shows Zone 43)		12	R	S
192	Dbs Trb Alm Rstl	TR Tamper Restoral	137 Tamper Alarm	Data bus device trouble condition cleared. (Shows Zone 43)		12	R	S
193	Siren Missg Alrm	TA Tamper Alarm	137 Tamper Alarm	Trouble condition detected on PO 2 configured as supervised siren output. (Shows Zone 44)		12	R	S
194	Siren Alarm Rstl	TR Tamper Restoral	137 Tamper Alarm	Trouble condition on supervised siren output cleared. (Shows Zone 44)		12	R	S

* This event reports a user number + 200 when sent using SIA and Contact reporting formats.

5.2 Glossary

24-Hour Zone: Zones that are always on even when the system is turned off. Two types: Fire Zones and Non-Fire Zones.

Account Number: The account number is the number the control panel transmits to the ARC receiver. It is not the Personal Identification Number (PIN). The account number is not sufficient identification to abort an alarm.

Address: Once the installer selects a value for a parameter, the control panel stores the selection in memory. Each parameter uses one or more Addresses. When programming from the keypad, the installer enters a selection directly into the memory Address(es). When programming from the remote programmer, the installer need only make one entry per parameter.

All On: All zones are armed. All On with No Entry (Instant) is an option.

ARC: Alarm Receiving Center. A facility where trained personnel monitor a security system 24 h a day. The security system might be programmed to contact the ARC during alarm conditions, enabling ARC personnel to dispatch the proper authorities.

Area (Partition): An installer-specified collection of zones that can be armed and disarmed independently. An Area can report with its own account number. Opening, closing, alarm, trouble and restoral reports are all associated with an Area. You can organize the control panel's zones and users into independent areas, in essence creating independent systems with a single control panel.

Authority Level: A programmable feature that determines which functions a user can perform in a specified Area.

Burg Alarm Tone: A constant warble tone.

Bypass: To selectively remove zones temporarily from the system.

Checksum: A method of checking accuracy of transmitted information. A number representing the total number of bits of information transmitted is included with the transmission. The microprocessor counts the bits of information received and compares its sum to the transmitted checksum number. If the numbers do not match, the transmission is in error.

Cross Zone: Two zones that are configured to initiate an alarm when both zones have been faulted. 24-Hour Door and 24-Hour Fire with Alarm Verification zones cannot be set for Cross Zone configuration.

Data Digit: Selections for data range from 0 to 15 (16 selections total). The programming selection made at each parameter is the **Data Digit**. For many programming parameters, there are less than 16 choices. To properly enter a data digit that is only one digit in length, press the appropriate number key on the keypad, or press [0] followed by the appropriate number key. Then press [*] to enter your choice into the system. For example, [4][*] and [0][4][*] are the same entry.

DACM: Door Access Control Module.

Duress PIN: A PIN that arms and disarms the system just like a user PIN does, however it also sends an alarm signal to the ARC without sounding an alarm on the premises.

Entry Delay: A programmed delay of the system alarm responses that allow a person to enter the building through the Entry door to turn the system off. An alarm response begins if the control panel is not disarmed before Entry Delay expires.

Error Tone: The same warble tone as the Trouble tone, but not repeated.

Faulted Zone: A zone that is not normal (for example, an open door or window).

Fire Alarm Tone: A warble tone that is on for one second, then briefly off (repeatedly).

Follower Zone: A zone programmed to initiate an instant alarm unless a Delay zone is faulted first. When a Delay zone is faulted first, the Follower zone assumes the Entry Delay time of the Delay zone.

Force Arming: A method of overriding the safety feature that prevents arming with a faulted zone on a control panel.

Global: Something that affects the entire system (for example, global zone configuration refers to the programmable features that affect all zones).

Groups: The programming parameters described in this manual are organized into groups. Most groups primarily contain parameters that are related in some way. For example, the Authority Levels Group contains parameters that configure the control panel's four Authority Levels.

Handshake: A signal sent by one end of the communications channel to the other indicating reception of signal.

Instant Alarm: A zone type that initiates an alarm immediately when faulted. This zone type does not follow any Entry/Exit delay time.

Keyfob: A small, hand-held wireless device usually designed to fit on a key chain. It consists of buttons that allow the user to perform various functions, depending on the keyfob, such as arming/disarming the system, operating outputs or sending reports.

Keyswitch: Two types: Momentary and Maintained. To operate a **Momentary Keyswitch**, insert the key, turn it and release it. The key returns to its starting position automatically. The key cannot be removed unless it is in the starting position. A **Maintained Keyswitch** typically has two positions marked “Armed” and “Disarmed.” To operate, insert the key, turn to desired position and remove the key.

Latching: The locking in of a circuit by means of a holding contact.

Location: A Location represents the following parameter assignments: Area, Zone Number and Device. A Location tells the control panel in which Area a device is assigned and by which Zone Number it reports as.

No Entry: Turning the system on without Entry Delay.

Off Display: The display that appears when the system is turned off and no keys are pressed (normal display).

One-Time PIN: A One-Time PIN can only be used once to turn the system off. This PIN is typically given to personnel who need temporary access to the premises, such as a baby-sitter or a service/maintenance crew.

Options: Options are a unique type of parameter that allows the installer to configure up to four features by entering a Data Digit at a single Address.

PSTN: **P**ublic **S**witched **T**elephone **N**etwork. An assembly of communications facilities and central office equipment operated jointly by authorized common carriers that provides the general public with the ability to establish communications channels via discrete dialing codes.

Parity: A method of checking the accuracy of transmitted data by adding an extra bit to the number when necessary to make the number odd or even.

Parameter: Each program parameter sets a specific value or chooses an option.

Partial On: A user-defined subset of the zones that arm. Partial On with No Entry (Instant) is an option.

Perimeter Only: An installer-defined subset of the zones that arm. Perimeter Only with No Entry (Instant) is an option.

PIN: **P**ersonal **I**dentification **N**umber. A unique number issued at the time of installation of each system. This PIN is required to operate the system (arm/disarm, test system, initiate functions, etc.). The PIN is not the same as the account number.

Press: These are used interchangeably instructing you to push down and then release a key.

RPS: **R**emote **P**rogramming **S**oftware is a Windows®-based account management and control panel programming utility designed to remotely set up and program specific control panels.

Restoral Report: A signal transmitted upon the removal of a trouble or alarm condition from a zone.

Sked: A scheduling parameter that allows a selected event to happen at a specific time.

Swinger Shunt: A programmable feature that determines the number of alarms or troubles the zone can transmit. If the number is exceeded, the zone is bypassed for the remainder of the arming period.

Tamper: Tamper conditions can be generated several different ways. A tamper-wired zone can report tamper because the zone is open or shorted. An RF transmitter can report a zone tamper because its case was tampered. A zone can be configured as a tamper zone. An off-normal tamper zone is a tamper condition. Different hardware devices can report tamper, including keypads, zone expanders, and RF receivers.

Trouble: A service condition that needs to be corrected, such as a broken wire.

Verified Alarm: When the area is armed, the first alarm (an unverified alarm) sends its normal alarm report. The Verified Alarm timer begins. If a second alarm occurs while the Verified Alarm Timer is running, the second alarm sends its normal alarm report and then sends a Verified Alarm report. If a second alarm occurs after the Verified Alarm Timer has expired, the second alarm starts the Verified Alarm Timer again and only sends its normal alarm report. A third alarm would have to occur when the Verified Alarm Timer is running in order to send the Verified Alarm report.

Visible Zone: A zone that displays at keypads during alarm or trouble conditions.

Zone: The control panel reports changing conditions on the sensor loops as Zone events. For example, when the condition on On-board Sensor Loop 1 changes from Normal (supervised EOL resistor in place) to Shorted, the control panel can be programmed to create an alarm event for Zone 1. That alarm event appears in keypad displays as “Alarm, Zn 1.” If programmed for reporting, the control panel would send an “Alarm, Zn 1” report to the ARC receiver in the programmed reporting format.

Zone Function: Use to construct “personality types” for zones used in the control panel. Each unique Zone Function Configuration determines responses to specific conditions occurring on the zones.

Zone Type: Describes what the zone does. For example, Fire zone, Burglar zone, 24-hour zone, etc.

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Notes

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